

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

Order Instituting Rulemaking to  
Advance Demand Flexibility  
Through Electric Rates.

FILED  
PUBLIC UTILITIES COMMISSION  
JULY 14, 2022  
DIAMOND BAR, CALIFORNIA  
RULEMAKING 22-07-005

**ORDER INSTITUTING RULEMAKING TO ADVANCE DEMAND FLEXIBILITY  
THROUGH ELECTRIC RATES**

**Summary**

This rulemaking seeks to enable widespread demand flexibility through electric rates. The Commission will establish demand flexibility policies and modify electric rates to advance the following objectives: (a) enhance the reliability of California’s electric system; (b) make electric bills more affordable and equitable; (c) reduce the curtailment of renewable energy and greenhouse gas emissions associated with meeting the state’s future system load; (d) enable widespread electrification of buildings and transportation to meet the state’s climate goals; (e) reduce long-term system costs through more efficient pricing of electricity; and (f) enable participation in demand flexibility by both bundled and unbundled customers.

In many decisions and forums, the Commission has recognized the critical role of demand response in ensuring system reliability, especially during severe weather events, as California’s electric system continues to integrate greater amounts of renewable generation and energy storage. The rapid growth of electric end uses – including electric vehicle charging, distributed energy resources, and building decarbonization – presents new challenges and

opportunities for coordinating demand flexibility to meet system needs on a regular basis.

However, the Commission's existing piecemeal approach to load management may hinder the growth and effectiveness of demand flexibility. This rulemaking will consider updates to the Commission's rate design principles, guidance principles for demand flexibility, and how to streamline the patchwork of niche rates and programs to expand the use of demand flexibility beyond early adopters.

Further, this proceeding will consider how demand flexibility policies, rates, tools, and programs can better support equitable and affordable rates for all Californians and advance the Commission's Environmental and Social Justice Action Plan.

This rulemaking will update the Commission's rate design principles and guidance for advancing demand flexibility. We may also modify, consolidate, or eliminate existing rates and authorize additional pilots, rates, programs, studies, or tools.

## **1. Background**

### **1.1. Severe Weather Events**

In August 2020, California experienced its hottest August on record and a record-breaking fire season, resulting in rolling electric outages. In 2021, the Commission issued a series of expedited decisions in Rulemaking (R.) 20-11-013 to ensure that there will be adequate electric power in the event of extreme weather during times of greatest need in the summers of 2021 through 2023. Decision (D.) 21-12-015 expanded existing demand-side solutions and adopted a series of new demand-side solutions, including two pilots to test the effectiveness

of dynamic rates that change rapidly in response to grid conditions, including emergencies.

## **1.2. Affordability**

In the spring of 2022, the Commission held an *en banc* hearing in R.18-07-006 to consider proposals to limit or mitigate energy rate increases. Several participants flagged the lack of alignment between peak periods for time-of-use rates and the needs of the electric system, and the potential for dynamic rates to optimize customer demand based on actual costs and grid conditions. Other participants questioned the use of ratepayer subsidies to incentivize customers to invest in electrification and distributed energy resources.

Participants also noted that high electric rates will deter customers from transitioning from gas to electricity. Multiple participants proposed income-differentiated fixed charges as an opportunity to recover fixed costs and prevent cost shifts in an equitable way.

## **1.3. Environmental and Social Justice Action Plan**

On February 21, 2019, the Commission released its first Environmental and Social Justice (ESJ) Action Plan. The goals include increasing climate resiliency of ESJ communities and increasing investment in clean energy resources to benefit ESJ communities. In October 2021, the Commission released a draft of the second version of its ESJ Action Plan.<sup>1</sup> The draft plan includes the strategies of ensuring meaningful involvement of ESJ communities in proceedings and thoroughly exploring the potential impacts of dynamic rates on these communities.

---

<sup>1</sup> The Commission's ESJ Action Plan is available at <https://www.cpuc.ca.gov/news-and-updates/newsroom/environmental-and-social-justice-action-plan>.

#### **1.4. Renewable Generation**

Senate Bill (SB) 100 (De León, 2018) established the policy to serve California electric customers with 100 percent renewable energy resources and zero-carbon resources by December 31, 2045. In March 2021, the Commission, the California Energy Commission, and the California Air Resources Board jointly issued the 2021 SB 100 Joint Agency Report, which highlighted the potential for demand flexibility to play an important role in achieving SB 100's goals.

#### **1.5. Transportation Electrification**

SB 350 (De León, 2015), established new greenhouse gas reduction goals for California and declared that widespread transportation electrification would be required to meet these goals and meet air quality standards. California law requires the deployment of electric vehicles to “assist in grid management, integrating generation from eligible renewable energy resources, and reducing fuel costs for vehicle drivers who charge in a manner consistent with electrical grid conditions.”<sup>2</sup>

#### **1.6. Building Decarbonization**

In September 2018, Governor Brown signed two bills into law related to reducing greenhouse gas emissions from buildings, SB 1477 (Stern, 2018) and Assembly Bill (AB) 3232 (Friedman, 2018). SB 1477 directs the Commission to develop, in consultation with the California Energy Commission, two programs aimed at reducing greenhouse gas emissions associated with buildings. AB 3232 directs the California Energy Commission to work with other state agencies to develop an assessment of the feasibility of reducing the greenhouse gas emissions of California's buildings 40 percent below 1990 levels by 2030.

---

<sup>2</sup> Section 740.12(a)(1)(G) of the Public Utilities Code.

### **1.7. Distributed Energy Resources**

In 2016, the Commission released its first Distributed Energy Resources Action Plan. The Commission adopted an updated Distributed Energy Resources Action Plan (DER Action Plan 2.0) in April 2022, which includes actions for advancement of demand flexibility, including real-time pricing rates and subscriptions for load shapes.<sup>3</sup>

### **1.8. Rate Design Principles**

In 2014, the Commission adopted ten rate design principles in D.14-06-029. These principles include encouraging conservation, energy efficiency, and reduction of both coincident and non-coincident peak demand. These principles need to be revisited and modernized.

### **1.9. Load Management Standards**

In December 2021, the California Energy Commission's staff proposed amendments to its Load Management Standards in Docket 21-OIR-03. The proposed amendments would create the following requirements for the five largest electric utilities in California and the community choice aggregators located within their boundaries: (i) develop retail electric rates that change at least hourly to reflect locational marginal costs; (ii) update the time dependent rates in the California Energy Commission's Market Informed Demand Automation Server (MIDAS) database; (iii) implement a single statewide standard method for providing automation service providers with access to customers' rate information; and (iv) educate and enable customers to participate in load management through participation in hourly rates or load flexibility programs based on hourly rates.

---

<sup>3</sup> The DER Action Plan 2.0 is available at <https://www.cpuc.ca.gov/about-cpuc/divisions/energy-division/der-action-plan>.

### **1.10. Demand Flexibility Whitepaper**

In June 2022, the Commission's Energy Division released a whitepaper (Demand Flexibility Whitepaper) proposing strategies for advancing demand flexibility through a universally accessible, dynamic, and economic signal.<sup>4</sup> The Demand Flexibility Whitepaper identified six strategies:

1. 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.
2. Introduce dynamic energy prices based on real-time wholesale energy costs that reflect the localized marginal cost of energy.
3. Incorporate dynamic capacity prices based on real-time grid utilization.
4. Offer bi-directional electricity prices that allow customers to import and export energy based on the same dynamic, composite prices.
5. Offer a subscription option based on customer-specific load shapes.
6. Enable transactive features that allow customers to lock in electricity prices to import or export a pre-determined quantity of energy at some future time.

### **2. Purpose of Proceeding**

The purpose of this proceeding is to enable widespread demand flexibility through electric rates. This rulemaking will establish policies and modify electric rates to advance the following objectives: (a) enhance the reliability of California's electric system; (b) make electric bills more affordable and equitable;

---

<sup>4</sup> The Demand Flexibility Whitepaper is available at <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-costs/demand-response-dr/demand-response-workshops/advanced-der-and-demand-flexibility-management-workshop>.

(c) reduce the curtailment of renewable energy and greenhouse gas emissions associated with meeting the state's future system load; (d) enable widespread electrification of buildings and transportation to meet the state's climate goals; (e) reduce long-term system costs through more efficient pricing of electricity; and (f) enable participation in demand flexibility by both bundled and unbundled customers.

First, this rulemaking will adopt updated rate design principles and guidance principles for advancing demand flexibility through rates while advancing the Commission's ESJ Action Plan goals. The scoping ruling will also establish two or more working groups to develop proposals for the proceeding.

The Commission anticipates that this proceeding will also consider: (i) reforming fixed charges and demand charges; (ii) modifying, consolidating, or eliminating existing tariffs for consistency with adopted principles; (iii) establishing policies and programs to advance demand flexibility pursuant to strategies identified in the Demand Flexibility Whitepaper or by a working group; and (iv) advancing the Commission's ESJ Action Plan through demand flexibility policies and programs.

### **3. Preliminary Scoping Memo**

This rulemaking will be conducted in accordance with Article 6 of the Commission's Rules of Practice and Procedure. As required by Rule 7.1(d), this Order Instituting Rulemaking (OIR) includes a preliminary scoping memo as set forth below, and preliminarily determines the category of this proceeding and the need for hearing.

In this Preliminary Scoping Memo, we describe the issues to be considered in this proceeding and the timetable for the proceeding. In response to this OIR, parties will have the opportunity to provide preliminary comments on the issues

raised. After a prehearing conference, the assigned Commissioner will issue a Scoping Memo and Ruling that will establish the issues and procedural path in greater detail.

### **3.1. Preliminary Issues**

The preliminary issues for the scope of this proceeding are as follows:

- a. How should the Commission update its rate design principles to enable widespread demand flexibility to improve system reliability and advance the state's climate goals in an affordable and equitable way?
- b. What guidance principles should the Commission adopt regarding demand flexibility rate design and evaluation? What statutory mandates or constraints should the Commission consider in developing this guidance?
- c. Should the Commission consider and/or authorize additional pilots, tariffs, programs, and/or studies to make demand flexibility options available to each customer class? If so, what factors should the Commission consider in assessing whether to authorize?
- d. How should the Commission reform demand charges for consistency with the adopted rate principles and demand flexibility guidance?
- e. How should the Commission reform fixed charges for recovery of certain authorized utility costs in accordance with the adopted rate principles and demand flexibility guidance?
- f. How should the Commission consolidate, modify, or eliminate existing tariffs for consistency with adopted rate design principles and demand flexibility guidance?
- g. How should the Commission ensure universal access to dynamic electricity prices by customers, devices, distributed energy resources, and third-party service providers? How should systems needed for universal access be funded, built, operated, and maintained?

- h. How should the Commission inform customers about dynamic rates, ease customers’ transitions to these rates, help them manage and plan their electricity usage, and protect them against bill volatility?
- i. How should the Commission ensure stable and adequate revenue collection for utilities through demand flexibility rates?
- j. How should the system benefits and savings resulting from demand flexibility be tracked, quantified, and incorporated into rates to pass on to customers?
- k. How should the Commission advance its ESJ Action Plan goals through demand flexibility rates, tools, programs, and/or reporting?
- l. What tools and policies are necessary to enable bundled and unbundled customers to participate more fully in demand flexibility rates?
- m. How should the Commission support the implementation of the amendments to the California Energy Commission’s Load Management Standards, if adopted? What actions should the Commission consider, if any, in addition to reviewing dynamic rates proposed by utilities and ensuring universal access to dynamic electricity prices?

**3.2. Preliminary Schedule**

The preliminary schedule for this proceeding is presented below.

EVENT	DATE
Opening Comments filed and served	Within 30 days of the effective date of this OIR
Reply Comments filed and served	Within 10 days of the date opening comments are due
Prehearing conference held	Quarter 3 of 2022
Scoping Memo and Ruling issued	Quarter 3 of 2022
Proposed Decision issued	No later than 90 days after submission of the record

EVENT	DATE
Opening Comments filed and served	Within 30 days of the effective date of this OIR
Commission Decision issued	No sooner than 30 days after Proposed Decision

The assigned Commissioner or the assigned Administrative Law Judge (ALJ) may change the schedule to promote efficient and fair administration of this proceeding.

Due to the complexity and number of issues in this proceeding, it is the Commission’s intent to complete this proceeding within 24 months of the date this OIR is adopted in accordance with Public Utilities Code Section 1701.5(b).

Notice of workshops in this proceeding will be served to the service list of this proceeding and posted on the Commission’s Daily Calendar to inform the public that a decision-maker or an advisor may be present at those meetings or workshops.

**4. Category of Proceeding; *Ex Parte* Communications; and Need for Hearing**

The Commission’s Rules of Practice and Procedure require that this OIR preliminarily determine the category of the proceeding and the need for hearing. As a preliminary matter, we determine that this proceeding is ratesetting. Accordingly, the *ex parte* rules of Article 8 of the Rules of Practice and Procedure apply.

Parties are reminded to not contact the assigned ALJ outside of a publicly-noticed forum, except that parties may send procedural questions by email to the assigned ALJ.

The Commission is also required to preliminarily determine if hearings are necessary. We preliminarily determine that hearings are necessary for this proceeding.

## **5. Respondents**

Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), Bear Valley Electric Service, Inc., Liberty Utilities, and PacifiCorp are named as respondents to this proceeding. All community choice aggregators are encouraged to participate in this proceeding.

Respondents are parties to the proceeding (*see* Rule 1.4(d)) and within 15 days of the effective date of this OIR, each respondent shall inform the Commission's Process Office of the contact information for a single representative; other representatives and persons affiliated with the respondents may be placed on the Information Only service list. The request must be sent to the Commission's Process Office by e-mail (Process\_Office@cpuc.ca.gov) or letter (Process Office, California Public Utilities Commission, 505 Van Ness Avenue, San Francisco, CA 94102). Please include the Docket Number of this rulemaking in the request.

## **6. Service of OIR**

This OIR shall be served on all respondents and all community choice aggregators. In addition, in the interest of broad notice, this OIR will be served on the official service lists for the following proceedings: R.18-07-006 (Affordability), R.19-01-011 (Building Decarbonization), R.20-11-003 (Reliable Electric Service), R.21-06-017 (High Distributed Energy Resources Future), Application (A.) 21-12-006 et al (SDG&E Real Time Pricing Pilot Rate), A.20-10-011 (PG&E's Commercial Electric Vehicle Dynamic Rate), A.19-11-019

(PG&E's general rate case (GRC) Phase II), A.17-01-012 et al (Demand Response 2018-2022 Application), R.21-10-002 (Resource Adequacy), A.20-10-012 (SCE's GRC Phase II), A.22-05-002 et al (2023-2027 Demand Response Applications).

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. Instructions for obtaining party status or being placed on the official service list are given below.

## **7. Filing and Service of Comments and Other Documents**

Filing and service of comments and other documents in the proceeding are governed by the Commission's Rules of Practice and Procedure.

Parties are instructed to only serve documents on the assigned Commissioner, advisors to the assigned Commissioner, and the assigned ALJ by electronic copy and *not* by paper copy, unless specifically instructed to do otherwise.

## **8. Addition to the Official Service List**

Addition to the official service list is governed by Rule 1.9(f) of the Commission's Rules of Practice and Procedure.

Respondents to this OIR automatically become parties to the proceeding (*see* Rule 1.4(d)) and will be immediately placed on the official service list.

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 do so promptly in order to ensure timely service of comments and other documents and correspondence in the proceeding. (*See* Rule 1.9(f).) The request must be sent to the Process Office by e-mail

([process\\_office@cpuc.ca.gov](mailto:process_office@cpuc.ca.gov)). Please include the Docket Number of this rulemaking in the request.

Persons who file responsive comments thereby become parties to the proceeding (*see* Rule 1.4(a)(2)) and will be added to the “Parties” category of the official service list upon such filing. In order 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 above; they will be removed from that category upon obtaining party status.

#### **9. 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/>.

#### **10. Intervenor Compensation**

Intervenor Compensation is permitted in this proceeding.

Pursuant to Public Utilities Code Section 1804(a)(1), a customer who intends to seek an award of compensation must file and serve a notice of intent to claim compensation by 30 days after the prehearing conference. Parties new to participating in Commission proceedings may contact the Commission’s Public Advisor to learn more about the Intervenor Compensation process.

#### **11. 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 (866) 849-8390 or e-mail

[public.advisor@cpuc.ca.gov](mailto:public.advisor@cpuc.ca.gov). The TTY number is (866) 836-7825.

## 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.
2. The preliminary categorization of this rulemaking is ratesetting.
3. The preliminary determination is that evidentiary hearings are needed for this rulemaking.
4. The preliminary scope of issues is as stated above in Section 3.
5. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Bear Valley Electric Service, Inc., Liberty Utilities, and PacifiCorp are respondents to this rulemaking.
6. Respondents to this Order Instituting Rulemaking and any other person may file opening comments responding to this Order Instituting Rulemaking within 30 days of the effective date of this Order Instituting Rulemaking.
7. The Executive Director will cause this Order Instituting Rulemaking to be served on all respondents, all community choice aggregators, and the service lists for the following Commission proceedings: Rulemaking (R.) 18-07-006, R.19-01-011, R.20-11-003, R.21-06-017, Application (A.) 21-12-006 et al (A.21-12-008), A.20-10-011, A.19-11-019, R.13-09-011, A.17-01-012 et al, R.21-10-002, A.20-10-012, A.22-05-002 Et Al (A.22-05-003, and A.22-05-004)."

8. 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.

This order is effective today.

Dated July 14, 2022, at Diamond Bar, California.

ALICE REYNOLDS  
President  
CLIFFORD RECHTSCHAFFEN  
GENEVIEVE SHIROMA  
DARCIE L. HOUCK  
Commissioners

Commissioner John Reynolds, being necessarily absent, did not participate.