

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking
Regarding Microgrids Pursuant to
Senate Bill 1339.

FILED
PUBLIC UTILITIES COMMISSION
SEPTEMBER 12, 2019
LOS ANGELES, CALIFORNIA
RULEMAKING 19-09-009

**ORDER INSTITUTING RULEMAKING REGARDING MICROGRIDS
PURSUANT TO SENATE BILL 1339**

Summary

The Commission initiates this Order Instituting Rulemaking (OIR) to begin crafting a policy framework surrounding the commercialization of microgrids.

This rulemaking will focus on implementation of Senate Bill (SB) 1339 (Stern, 2018), which statutorily defines a microgrid as:¹

[A]n interconnected system of loads and energy resources, including, but not limited to, distributed energy resources, energy storage, demand response tools, or other management, forecasting, and analytical tools, appropriately sized to meet customer needs, within a clearly defined electrical boundary that can act as a single, controllable entity, and can connect to, disconnect from, or run in parallel with, larger portions of the electrical grid, or can be managed and isolated to withstand larger disturbances and maintain electrical supply to connected critical infrastructure.

¹ Pub. Util. Code § 8370(d).

SB 1339 requires the Commission, in consultation with the California Energy Commission, and the California Independent System Operator, by December 1, 2020, to take a number of specific actions to facilitate the commercialization of microgrids for distribution customers of large electrical corporations. These actions include developing standards, protocols, guidelines, methods, rates, and tariffs that serve to support and reduce barriers to microgrid deployment while prioritizing system, public, and worker safety, and avoiding shifting costs between ratepayers.

The scope of this proceeding may include all microgrid policy framework issues. This includes programs, rules, and rates related to microgrids that will help accomplish the state's broader policy goals. Broader state policy goals in which microgrids may play a role include, but are not limited to: (1) reducing greenhouse gas emissions; (2) adapting to the impacts of a changing climate; and (3) protecting the health, safety, and lives of California residents during catastrophic events, such as wildfires, floods, earthquakes, extreme weather, or cyber-attacks. The proceeding may also examine whether to launch pilot microgrid programs to benefit communities most likely to be affected by public safety power shutoffs.

All large electrical corporations, as defined by SB 1339,² will be respondents to this proceeding. This rulemaking will be served on the service lists of a large number of proceedings that currently contain, or may contain, issues related to microgrids.

² Pub. Util. Code § 8370(c) defines large electrical corporations as those with 100,000 or more service connections in California. This includes the following large electrical corporations: (1) Pacific Gas and Electric Company; (2) Southern California Edison Company; and (3) San Diego Gas & Electric Company.

Parties are invited to comment on this OIR and its initial proposed scope within 30 days of the issuance of this rulemaking. Reply comments may be filed within 15 days after filing and service of comments.

1. Background

The Public Utilities Code provides that each “each electrical corporation, as part of its distribution planning process, shall consider nonutility owned distributed energy resources as a possible alternative to investments in its distribution system in order to ensure reliable electric service at the lowest possible cost.”³

The Commission has developed policies to facilitate the deployment of ever-greater quantities of distributed energy resources⁴ located within the investor-owned utility (IOU) distribution system. This includes the Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans, Rulemaking (R.) 14-08-013. In recognition that microgrids may support California’s policies to integrate a high concentration of distributed energy resources on the electric grid,⁵ the Legislature passed Senate Bill (SB) 1339, which added Sections 8370, 8371, and 8372 to the Public Utilities Code.

Among other things, SB 1339 found that many electricity customers are seeing the potential benefits of investing in their own distributed energy

³ Pub. Util. Code § 353.5.

⁴ Distributed energy resources are distribution-connected distributed generation resources, energy efficiency, energy storage, transportation electrification, and demand response technologies. See *Integrated Distributed Energy Resources*, available at: <https://www.cpuc.ca.gov/General.aspx?id=10710>

⁵ California Legislative Information, Senate Bill 1339 legislative history, August 31, 2018, available at: https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201720180SB1339

resources. As part of this, SB 1339 found that microgrids – as a distributed energy resource – may help electricity customers ensure their own level of reliability, may help an electricity customer manage its needs better, act as an aggregated single entity to the distribution system operator, and may support California’s policies to integrate a high concentration of distributed energy resources on the electric grid.⁶

Microgrid commercial activity is still nascent, and prior to the passage of SB 1339, was not the subject of direct policy guidance by the California Legislature. Yet, issues related to the use and deployment of microgrids received attention from Commission and California Energy Commission (CEC) staff. For example, microgrids were explored under the CEC’s 2015 report, *Microgrid Assessment and Recommendations to Guide Future Investments* (CEC Report)⁷ and under the Commission’s own 2014 report, *Microgrids: A Regulatory Perspective* (Commission Report).⁸ In addition, many California microgrid projects have been funded under the Electric Program Investment Charge (EPIC), a ratepayer funded research and development program overseen by the Commission and administered by the CEC.⁹ The EPIC-funded microgrid projects have provided valuable opportunities to demonstrate capabilities, identify challenges, and learn from a variety of different real-world microgrid installations.

⁶ Pub. Util. Code § 8370.

⁷ CEC *Microgrid Assessment and Recommendations to Guide Future Investments Report*, July 2015, available at: <https://ww2.energy.ca.gov/2015publications/CEC-500-2015-071/CEC-500-2015-071.pdf>

⁸ CPUC *Microgrids: A Regulatory Perspective Report*, April 2014, available at: <https://www.cpuc.ca.gov/General.aspx?id=5071>

⁹ Materials from an April 26, 2019 public workshop on lessons learned from microgrids funded by the EPIC program are available at: https://ww2.energy.ca.gov/research/notices/2019-04-26_workshop/presentations/

The CEC Report focused on assessing microgrids in California.¹⁰ Specifically, the CEC Report outlined the lessons learned from operational microgrids, identified key barriers in planning, development, construction, interconnection, operation, and commercialization of microgrids. The CEC Report also identified gaps in the research and development of microgrids to guide future state and federal investments.

The Commission Report discussed the regulatory landscape for the deployment of microgrids in California.¹¹ The Commission Report focused on the benefits of microgrids, policies affecting the regulation and deployment of microgrid development, and key challenges that should be addressed in facilitating the development of microgrids.

These microgrid policy inquiries and SB 1339's statutory requirements stimulate the need for a new Commission rulemaking focused specifically on policies to support microgrids. Therefore, our objective in this OIR, is to fulfill the legislative intent and requirements as set forth in SB 1339; as well as to develop a new framework, as appropriate, to enable microgrids to fulfill state policy goals consistent with the Commission's core responsibilities, and in consultation with CEC, California Independent System Operator (CAISO), and other stakeholders.

2. Preliminary Scoping Memo

This rulemaking will be conducted in accordance with Article 6 of the Commission's Rules of Practice and Procedure, "Rulemaking." As required by

¹⁰ CEC *Microgrid Assessment and Recommendations to Guide Future Investments Report*, July 2015, available at: <https://ww2.energy.ca.gov/2015publications/CEC-500-2015-071/CEC-500-2015-071.pdf>

¹¹ CPUC *Microgrids: A Regulatory Perspective Report*, April 2014, available at: <https://www.cpuc.ca.gov/General.aspx?id=5071>

Rule 7.1(d)¹² of the Commission's Rules of Practice and Procedure (Rules), this Order includes a preliminary scoping memo as set forth below, and preliminarily determines the category of this proceeding and the need for hearings.

In this Preliminary Scoping Memo, we describe the issues to be considered in this proceeding and the timetable for resolving the proceeding. In response to this rulemaking order, parties will have the opportunity to provide preliminary comments on the issues raised. After a prehearing conference, an Assigned Commissioner's Scoping Ruling will be issued laying out the issues and procedural path in greater detail.

2.1. Issues

This proceeding shall implement the requirements of SB 1339 relating to the facilitation of the commercialization of microgrids for distribution customers of large electrical corporations. This proceeding shall focus on the issues raised by Sections 8370-8371 of the Public Utilities Code, as added by SB 1339. This proceeding shall also ensure that SB 1339 is implemented in a consistent manner with the Commission's core responsibilities and broader state policy goals. These issues, as codified under Section 8371, and consistent with our broader responsibilities and policy goals, are:

1. Develop microgrid service standards necessary to meet state and local permitting requirements, pursuant to Section 8371(a).

¹² "An order instituting rulemaking shall preliminarily determine the category and need for hearing, and shall attach a preliminary scoping memo. The preliminary determination is not appealable, but shall be confirmed or changes by assigned Commissioner's ruling [ACR] pursuant to Rule 7.3, and such ruling as to category is subject to appeal under Rule 7.6." (Rule 7.1(d).)

2. Develop methods to reduce barriers for microgrid deployment, without shifting costs between ratepayers, pursuant to Section 8371(b).
3. Develop guidelines to determine what impact studies are necessary for microgrids to connect to the electrical corporation grid, pursuant to Section 8371(c).
4. Develop separate rates and tariffs, that are just and reasonable, to support microgrids, pursuant to Section 8371(d).
 - i. Ensure that the separate rates and tariffs shall not compensate a customer for the use of diesel backup or natural gas generation, except as either of those sources is used pursuant to Section 41514.1 of the Health and Safety Code, or except for natural gas generation that is a distributed energy resource, pursuant to Section 8371(d).
 - ii. Ensure that the development of microgrids ensures system, public, and worker safety, pursuant to Section 8371(d).
5. Facilitate the formation of a working group to codify standards and protocols needed to meet California electrical corporation and CAISO microgrid requirements, pursuant to Section 8371(e).
6. Develop a standard for direct current metering in Electric Rule 21 to streamline the interconnection process and lower interconnection costs for direct current microgrid applications, pursuant to Section 8371(f), including net energy metering paired with storage systems and microgrids.
7. Ensure that the actions taken by the Commission to fulfill the requirements of SB 1339 do not discourage or prohibit the development or ownership of a microgrid by an electrical corporation, pursuant to Section 8371.5.
8. Ensure that any microgrid programs, rules, or rates developed to implement the requirements of SB 1339 are consistent with relevant state policy goals and are

coordinated with existing Commission responsibilities and policies.

3. Invitation to Comment on Preliminary Scoping Memo

This Order Instituting Rulemaking (OIR) solicits party comment on the Preliminary Scoping Memo and issues identified in this document.

In particular, we invite parties to comment on:

- The appropriateness (or lack thereof) of issues included in the preliminary scope of this proceeding;
- Whether there are additional issues that should be included in the scope of this proceeding;
- The appropriate prioritization or sequencing of topics and activities that should be handled in this proceeding leading to Commission decision(s); and
- Any specific issues previously addressed or underway in other Commission proceedings that require coordination with this rulemaking.

Initial comments are due to be filed and served no later than 30 days after issuance of this rulemaking, with reply comments 45 days later. The Commission will use parties' comments and a prehearing conference, to be scheduled, as a basis to identify areas that need clarification, and may consider the addition of specific issues or questions related to the items described in Section 2.1 on the scope of this proceeding, pursuant to the guidance set forth herein.

We direct parties to limit their comments to the specific issues set forth in this OIR, as well as to objections to the preliminary determinations below. Comments are limited to no more than 25 pages per party, with replies limited to 15 pages per party.

4. Initial Schedule

A prehearing conference will also be scheduled after comments and replies are submitted. The preliminary schedule is captured in the table, below:

Preliminary Schedule

Proceeding Milestone	Date
Comments on OIR filed and served	30 days after OIR issuance
Reply comments on OIR filed and served	45 days after OIR issuance
Prehearing Conference	Quarter 4 of 2019
Scoping Ruling	Quarter 1 of 2020
Ruling on Proposed Approach to Implementing SB 1339	Quarter 3 of 2020
Comments/Reply and Party Alternative Proposals on Proposed Approach to Implementing SB 1339	Quarter 3 of 2020
Proposed decision addressing SB 1339	Quarter 4 of 2020

Each of the issue areas outlined in the Preliminary Scoping Memo will likely require different types and degrees of public participation. Therefore, we delegate further definition of procedure and schedule for each issue area to the assigned Commissioner and Administrative Law Judge (ALJ) as determined in the Scoping Ruling or a later ruling.

We leave open the possibility that issue areas may be decided upon individually in interim decisions, if necessary. In addition, we authorize the assigned Commissioner and ALJ to organize issues within the proceeding, including creating tracks for organization. The assigned Commissioner or ALJ has the authority to make changes to the above schedule.

This proceeding will conform to the statutory case management deadline for ratesetting matters set forth in § 1701.5. In particular, it is our intention to resolve all relevant issues within 24 months of the date this OIR is adopted. In using the authority granted in § 1701.5(b) to set a time longer than 18 months, we

consider the number and complexity of the tasks and the need to coordinate with multiple other proceedings.

In addition, there will likely be workshops in this proceeding. Notice of such workshops will be 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. Parties should check the Daily Calendar regularly for such notices.

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

Pursuant to Rule 7.1(d), as a preliminary matter, we determine that this proceeding is categorized as ratesetting. Accordingly, *ex parte* communications are subject to the restrictions and reporting requirements set forth in Article 8 of the Rules.

We are also required to preliminarily determine if hearings are necessary. We preliminarily determine that hearings are necessary.

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

6. Respondents

Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Pacific Gas and Electric Company (PG&E) are named as respondents to this proceeding.

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, although other representatives and persons affiliated with the respondents may be placed on the Information Only service list.

7. Service List

The OIR shall be served on all respondents.

In addition, in the interest of broad notice, this OIR will be served on the official service lists for the following proceedings:

	Docket	Proceeding Number
1	Integrated Resource Planning	R.16-02-007
2	Energy Efficiency	R.13-11-005 and A.17-01-013 et al.
3	Rulemaking on Affordable Energy in the San Joaquin Valley	R.15-03-010
4	Rulemaking to Consider Streamlining Interconnection of Distributed Energy Resources and Improvements to Rule 21	R.17-07-007
5	Low Income Energy Efficiency	A.15-02-001 et al.
6	Self Generation Incentive Program	R.12-11-005
7	Electricity Storage	A.18-02-016 et al.
8	Net Energy Metering	R.14-07-002
9	Demand Response	R.13-09-011
10	EPIC on Research and Development	A.17-04-028 et al.
11	Transportation Electrification	R.18-12-006
12	Distribution Resources Planning	R.14-08-013 et al.
13	Integrated Distributed Energy Resources	R.14-10-003
14	Climate Adaptation	R.18-04-019
15	Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local and Flexible Procurement Obligations for the 2019 and 2020 Compliance Years.	R.17-09-020
16	Rulemaking to Implement Senate Bill 237 Related to Direct Access	R.19-03-009
17	Rulemaking Regarding Building Decarbonization	R.19-01-011
18	Rulemaking Regarding Emergency Disaster Relief Program	R.18-03-011
19	Rulemaking to Implement Electric Utility Wildfire	R.18-10-007

	Mitigation Plans Pursuant to Senate Bill 901	
20	Rulemaking to examine Electric Utility De-Energization of Power Lines in Dangerous Conditions	R.18-12-005

In addition, in the interest of broad notice, this OIR will be served on the following

- The California Air Resources Board;
- The California Energy Commission;
- The California Independent System Operator;
- The Governor’s Office of Business Development;
- State Board of Forestry and Fire Protection (CAL FIRE);
- California Office of Emergency Services;
- California Department of Fish and Wildlife;
- California Office of Planning and Research;
- California Infrastructure and Economic Development Bank;
- California State Association of Counties;
- League of Cities;
- California Native American Heritage Commission; and
- California Municipal Utilities Association.

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.

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

Respondents are parties to the proceeding (*see* Rule 1.4(d)).

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 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.

Persons who file responsive comments 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.

8. 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/>.

9. 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 a timely notice of intent to claim intervenor compensation. (See Rule 17.1(a).) 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.

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 (866) 849-8390, or e-mail public.advisor@cpuc.ca.gov. The TTY number is (866) 836-7825.

O R D E R

IT IS ORDERED that:

1. The Commission institutes this rulemaking to enhance efforts to facilitate the commercialization of microgrids for distribution customers of large electrical corporations and to ensure that we comply with Senate Bill 1339, as codified in Public Utilities Code Sections 8370, 8371, and 8372.

2. All large jurisdictional electrical corporations, including Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company are named as respondents to this proceeding.

3. The Executive Director shall cause this Order Instituting Rulemaking to be served on the service lists for all proceedings listed in Section 7, of this order, as replicated below:

	Docket	Proceeding Number
1	Integrated Resource Planning	R.16-02-007
2	Energy Efficiency	R.13-11-005 and A.17-01-013 et al.
3	Rulemaking on Affordable Energy in the San Joaquin Valley	R.15-03-010
4	Rulemaking to Consider Streamlining Interconnection of Distributed Energy Resources and Improvements to Rule 21	R.17-07-007
5	Low Income Energy Efficiency	A.15-02-001 et al.
6	Self-Generation Incentive Program	R.12-11-005
7	Electricity Storage	A.18-02-016 et al.

8	Net Energy Metering	R.14-07-002
9	Demand Response	R.13-09-011
10	EPIC on Research and Development	A.17-04-028 et al.
11	Transportation Electrification	R.18-12-006
12	Distribution Resources Planning	R.14-08-013 et al.
13	Integrated Distributed Energy Resources	R.14-10-003
14	Climate Adaptation	R.18-04-019
15	Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local and Flexible Procurement Obligations for the 2019 and 2020 Compliance Years.	R.17-09-020
16	Rulemaking to Implement Senate Bill 237 Related to Direct Access	R.19-03-009
17	Order Instituting Rulemaking Regarding Building Decarbonization	R.19-01-011
18	Order Instituting Rulemaking Regarding Emergency Disaster Relief Program	R.18-03-011
19	Order Instituting Rulemaking to Implement Electric Utility Wildfire Mitigation Plans Pursuant to Senate Bill 901	R.18-10-007
20	Rulemaking to examine Electric Utility De-Energization of Power Lines in Dangerous Conditions	R.18-12-005

4. Respondents, parties, and/or prospective parties may file and serve comments on the preliminary scope of this proceeding outlined in this document no later than 30 days after the issuance of this order. Pursuant to Rule 6.2 of the Commission's Rules of Practice and Procedure, parties shall include in their comments any objections regarding the category, need for hearing, issues to be considered, or schedule. Comments shall be limited to no more than 25 pages per party. Reply comments may be filed and served no later than 15 days after filing and service of comments and shall be limited to no more than 15 pages per party.

5. Any person or representative of an entity interested in participating in or monitoring this proceeding that does not make an appearance at the prehearing conference shall follow the process for doing so set forth herein.

6. The category of this rulemaking is preliminarily determined to be ratesetting.

7. Evidentiary hearings are preliminarily determined to be needed.

8. Any party that expects to claim intervenor compensation for its participation in this rulemaking must timely file its notice of intent to claim intervenor compensation.

9. The assigned Commissioner or Administrative Law Judge may make any revisions to the scheduling and filing determinations made herein as necessary to facilitate the efficient management of the proceeding, including organization of issues into separate tracks of the proceeding.

This order is effective today.

Dated September 12, 2019, at Los Angeles, California.

MARYBEL BATJER
President
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
Commissioners