

Decision 21-07-011 July 15, 2021

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking
Regarding Microgrids Pursuant to
Senate Bill 1339 and Resiliency
Strategies.

Rulemaking 19-09-009

**DECISION ADOPTING A SUSPENSION OF THE CAPACITY RESERVATION
COMPONENT OF THE STANDBY CHARGE FOR ELIGIBLE
MICROGRID DISTRIBUTED TECHNOLOGIES**

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**DECISION ADOPTING A SUSPENSION OF THE CAPACITY RESERVATION
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MICROGRID DISTRIBUTED TECHNOLOGIES**

Summary

This decision directs Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) to provide rate schedule(s) that suspend the capacity reservation component of their standby charge for eligible microgrids that meet the California Air Resources Board air pollution standards for generation. This suspension will allow the Commission and stakeholders to ascertain the costs that the utilities incur to provide standby service to microgrids.

The suspension of the capacity reservation component of the standby charge is limited to specific eligibility and microgrid performance requirements. First, the qualifying eligibility requirements include: (a) technologies that meet the California Air Resources Board's distributed generation criteria air pollution standards; and (b) technologies that prove, by manufacturer certification, that they have the capability to operate using cleaner renewable fuels such as, but not limited to, renewable natural gas, biogas, or green hydrogen at the time of application for the suspension; and (c) form a commitment to convert the microgrid to and utilize only, as reasonably practicable, renewable fuels by December 31, 2030. The suspension of the capacity reservation component of the standby charge is also limited to those eligible customers operating under retail tariffs and interconnected under Rule 21 who meet the microgrid performance standards adopted by this decision.¹ Microgrid customers utilizing technologies

¹ Eligibility is restricted to resources interconnected under Rule 21 because the Commission does not have sole jurisdiction over resources interconnected under other tariffs, such as the Wholesale Distribution Access Tariff.

that receive payments from the Self Generation Incentive Program ("SGIP") must demonstrate how the microgrid provides incremental benefits to qualify for the waiver.

Second, we limit the suspension of the capacity reservation component of the standby charge to eligible microgrid customers who meet the microgrid performance standard adopted by this decision. This means that for eligibility purposes, in addition to the requirements set forth above, the microgrid customer must: (1) have a capacity factor of greater than 85 percent or a self-supply factor of greater than 85 percent and; (2) have an availability of greater than 95 percent. Additionally, the microgrid customer must certify, to the utility, at the time of interconnection, that the microgrid is designed to meet these performance standards by submitting: (a) independently verified, reputable third-party bench test data over a shorter time period that, when extrapolated, would meet the performance standards adopted by this decision; or (b) actual, real-time operating performance data for substantially similar equipment meeting the performance standards adopted by this decision. If the candidate microgrid meets the performance standards, then they will be eligible for this suspension program. The microgrid customer must recertify semi-annually, to the utility, that the microgrid is maintaining compliance with the performance standard adopted by this decision. Failure to maintain semi-annual recertification of the microgrid's compliance with the performance standards to the utility shall result in immediate termination from the reservation capacity component suspension.

Third, this decision does not require the microgrid customer to physically separate their system from the utility distribution system in the event their microgrid generators are unable to serve load. Should the microgrid customer

who is receiving the suspension suffer a generation failure, and cannot serve its load, it may rely on the utility's system. In exchange for this reliance, the microgrid customer shall pay, directly to the utility, a Demand Assurance Amount for the service the utility system provides during the microgrid generation failure.

PG&E, SCE, and SDG&E shall each file Tier 1 Advice Letters, within 30 days upon the effective date of this decision, establishing a two-way balancing account to ensure tracking of the costs associated with the suspension of the capacity reservation component of the standby charge. Additionally, PG&E, SCE, and SDG&E shall also track the revenue received from the Demand Assurance Amount in this account, should a microgrid's generation fail or be insufficient to meet its demand, and the microgrid customer relies on the utility to provide its electric service. PG&E, SCE, and SDG&E shall record any incremental costs associated with implementing the decision in a separate subaccount of the two-way balancing account established in this decision. For example, this may include the additional costs associated with billing system changes and administration of the new rate structure.

Finally, PG&E, SCE, and SDG&E shall each file Tier 2 Advice Letters, within 90 days upon the effective date of this decision, that revise applicable tariff documents related to the provisions of standby service to comply with Section 3.2.2 of this decision.

All comments submitted by parties were considered but, issues within the scope of the proceeding that are not addressed here, or only partially addressed, may be addressed in Track 4 or another subsequent track of this proceeding.

This proceeding remains open.

1. Background

In September 2019, the California Public Utilities Commission (Commission) opened this rulemaking² to facilitate the commercialization of microgrids and adopt resiliency strategies pursuant to Senate Bill (SB) 1339 (Stern, Stats. 2018, Ch. 566). SB 1339 requires the Commission, in consultation with the California Energy Commission (CEC), and the California Independent System Operator (CAISO), by December 1, 2020, to take specific actions to facilitate the commercialization of microgrids for distribution customers of large electrical corporations.

Components of microgrid commercialization are set by SB 1339, and must include: (1) rates, tariffs, and rules, as necessary; that (2) remove barriers for deploying microgrids across the large investor-owned utility service territories; (3) without shifting costs onto non-benefiting customers; and (4) prioritizing and ensuring worker, public, and the electric system's safety and reliability.

In response to SB 1339's mandates and statutory deadline, the Commission issued two landmark decisions facilitating the commercialization of microgrids within twelve months: (1) Decision (D.) 20-06-017; and (2) D.21-01-018.

1.1. Track 1

Track 1 of this proceeding began in December 2019, with an Energy Division workshop.³ This workshop facilitated discussion between stakeholders, focusing on short-term actions related to microgrids and resiliency strategies for Summer 2020 implementation. Following this workshop, a prehearing

² Order Instituting Rulemaking Regarding Microgrids Pursuant to Senate Bill (SB) 1339 and Resiliency Strategies, September 12, 2019.

³ December 4, 2019 Administrative Law Judge's Ruling Noticing Microgrid Workshop.

conference was held on December 17, 2019. Then, the Track 1 Scoping Memo and Ruling was issued on December 20, 2019.⁴

Since the issuance of the Track 1 Scoping Memo and Ruling, much activity occurred in this proceeding. This includes but is not limited to: (1) the issuance of a Track 1 Energy Division Staff Proposal; (2) the submittal of Track 1 large electrical corporation investor-owned utility (IOU) resiliency proposals for the 2020 wildfire season; and (3) the adoption of D.20-06-017, which promulgated an array of rules to accelerate microgrid deployment pursuant to SB 1339 and resiliency solutions.

Well in advance of the December 1, 2020 statutory deadline of SB 1339, D.20-06-017 satisfied many of SB 1339's requirements by implementing the following:

1. Permitting Requirements 8371, subdivision (a)
 - a) Required the development of a template-based application process for specific behind-the-meter project types to prioritize, streamline, and expedite applications and approvals for key resiliency projects.
2. Barrier Reduction 8371, subdivision (b)
 - a) Required the development of a template-based application process for specific behind-the-meter project types to prioritize, streamline, and expedite applications and approvals for key resiliency projects.
 - b) Added dedicated staff to the utilities' distribution planning teams that specialize in resiliency project development for local jurisdictions.
 - c) Allowed energy storage systems, in advance of Public Safety Power Shutoff (PSPS) events, to import

⁴ Assigned Commissioner's Scoping Memo and Ruling, December 20, 2019.

from – but not export to – the grid, in support of preparedness in advance of a grid outage.

- d) Removed the storage sizing limit for large net energy metering (NEM)-paired storage and maintained existing metering requirements.
 - e) Required the development of a separate access-restricted portal for local jurisdictions that gives information to support local community resiliency projects.
 - f) Approved the Pacific Gas and Electric Company's (PG&E) Community Microgrid Enablement Program which provides incremental technical and financial support on a prioritized basis for community requested microgrids for PSPS mitigation purposes.
 - g) Approved PG&E's Make-Ready Program for the period of 2020 through 2022 which includes enabling each of the prioritized substations to operate in islanded mode.
 - h) Approved PG&E's Temporary Generation Program which involves leasing mobile generators for temporary use during the 2020 wildfire season.
 - i) Approved San Diego Gas & Electric Company's (SDG&E) request to procure a local area distribution controller.
3. Rates and Tariffs 8371, subdivision (d)
- a) Allowed energy storage systems, in advance of PSPS events, to import from – but not export to – the grid in support of preparedness in advance of a grid outage.
 - b) Removed the storage sizing limit for large NEM-paired storage and maintained existing metering requirements.
4. Standards and Protocols 8371, subdivision (e)
- a) Developed a template - based application process for specific behind-the-meter project types to prioritize, streamline, and expedite applications and approvals for key resiliency projects.

- b) Approved SDG&E's request to procure a local area distribution controller.

1.2. Track 2

Following the adoption of D.20-06-017 on June 17, 2020, the Track 2 Amended Scoping Memo and Ruling was issued on July 3, 2020.⁵ This amended Scoping Memo and Ruling focused on the continued implementation of SB 1339 through the contours of Public Utilities Code Section 8371.⁶

On July 23, 2020, the assigned Administrative Law Judge (ALJ) issued a ruling⁷ with a proposal prepared by the Energy Division, titled, *Facilitating the Commercialization of Microgrids Pursuant to Senate Bill 1339* (Staff Proposal). Parties to this proceeding attended an August 2020 workshop to discuss the Staff Proposal. Following the workshop, parties submitted comments in response to the Staff Proposal.

On August 25, 2020, Energy Division held another all-day online public workshop discussing the challenges and demands associated with energizing safe-to-energize substations during PSPS events. Officials from the Commission as well as the California Air Resources Board (CARB) and the CEC were present. On September 4, 2020, following the Energy Division workshop, the assigned Commissioner and ALJ issued a ruling⁸ seeking comment on policy questions and proposed an interim approach for minimizing emissions from generation during transmission outages. The interim approach for minimizing emissions

⁵ Assigned Commissioner's Amended Scoping Memo and Ruling, July 3, 2020.

⁶ Unless otherwise specified, all subsequent section references are to the Public Utilities Code.

⁷ ALJs Ruling, July 23, 2020.

⁸ Assigned Commissioner and ALJ's Ruling Seeking Comment on Policy Questions and an Interim Approach for Minimizing Emissions from Generation During Transmission Outages, September 4, 2020.

during transmission outages proposed a process for transition to clean temporary generation in 2022 and beyond.

On January 21, 2021, the Commission issued D.21-01-018 that adopts rates, tariffs, and rules for facilitating the commercialization of microgrids pursuant to Senate Bill (SB) 1339. This decision continues the Commission's goal of commercializing microgrids and reduces barriers for microgrid deployment across California. D.21-01-018 also adopts an interim approach for minimizing emissions from generation during transmission outages and a process for transitioning to clean temporary generation in 2022 and beyond.

Specifically, D.21-01-018 orders the following primary actions from the state's large IOUs:

1. Southern California Edison Company (SCE) to revise its Rule 2 to permit installing added or special facilities microgrids.
2. SCE and PG&E to revise their Rules 18 and SDG&E to revise its Rule 19, to allow local government microgrids to service critical customers on adjacent parcels.
3. SCE, PG&E, and SDG&E to each create a renewable microgrid tariff that prevents cost shifting for their territories.
4. SCE, PG&E, and SDG&E to jointly develop a statewide Microgrid Incentive Program with a \$200 million budget to fund clean energy microgrids to support the critical needs of vulnerable communities impacted by grid outages and test new technologies or regulatory approaches to inform future action.
5. SCE, PG&E, and SDG&E to develop pathways for the evaluation and approval of low-cost, reliable electrical isolation methods to evaluate safety and reliability.

D.21-01-018 also formalized the creation of a Resiliency and Microgrids Working Group to facilitate thoughtful and informed discussions to continue to

support the goal of resiliency and the commercialization of microgrids within Track 3 and beyond.

1.3. Track 3

Less than a month after the adoption of D.21-01-018, the assigned Commissioner issued an Amended Scoping Memo and Ruling for Track 3 on February 9, 2021. The Amended Scoping Memo and Ruling focused on whether to waive or reduce standby service charges in exchange for the value that resiliency microgrids may offer.

In Track 2 of this proceeding, some parties fervently advocated for microgrid exemption from cost-responsibility surcharges. Other parties argued that exemption from cost-responsibility surcharges contravenes SB 1339's prohibition against cost shifting. Track 3 was initiated to consider a subset of such charges – the standby charge – within the context of SB 1339's cost shifting prohibition.

To develop a record for Track 3, parties were directed to answer a series of questions that were included as an attachment to the February 9, 2021 Amended Scoping Memo and Ruling. Parties filed and served opening and reply comments to the Amended Scoping Memo and Ruling's attachment on March 3, and March 10, 2021, respectively.

1.4. Parties Response to the Amended Scoping Memo and Ruling Attachment

Comments were filed on March 3, 2021 by: (1) Bloom Energy Corporation (Bloom); (2) California Clean DG Coalition (CCDC); (3) California Energy Storage Alliance (CESA); (4) California Environmental Justice Alliance (CEJA); (5) Center for Energy Efficiency and Renewable Technologies (CEERT); (6) Clean Coalition; (7) Doosan Fuel Cell America, Inc. (Doosan); (8) Enchanted Rock; (9) FuelCell Energy, Inc. (FCE); (10) Microgrid Resources Coalition (MRC);

(11) PG&E; (12) Public Advocates Office (Cal Advocates); (13) SDG&E; (14) Sierra Club; (15) SCE; (16) Southern California Gas Company (SoCalGas); (17) The Climate Center, The Green Power Institute, Vote Solar (The Vote Solar Parties); and (18) Unison Energy, LLC (Unison).

Reply comments were filed on March 10, 2021 by: (1) Bloom; (2) Cal Advocates; (3) California Hydrogen Business Council (CHBC); (4) California Independent System Operator (CAISO); (5) CEERT; (6) Center for Accessible Technology (CforAT); (7) Clean Coalition; (8) The Vote Solar Parties; (9) Doosan; (10) MRC; (11) PG&E; (12) SCE; (13) SDG&E; (14) Small Business Utility Advocates (SBUA); and (15) SoCalGas.

2. Issues Before the Commission

The issue before the Commission is:

1. Whether the Commission should require PG&E, SCE, and SDG&E to waive standby charges for a customer operating a microgrid, regardless of fuel source, *so long as*:
 - (1) waiving a standby charge will enable the microgrid customer to provide an incremental benefit to other customers that is (2) *commensurate* with the magnitude of the otherwise applicable standby charges.
- a. Should the Commission limit the eligibility of microgrid resources for the standby charge waiver to ensure compliance with the State's air pollution and greenhouse gas emissions reduction requirements?
- b. Under what conditions should standby charges be waived or reduced?

3. Discussion

Pursuant to Article XII, Sections one through six of the California Constitution, the Commission “has broad authority to regulate utilities.”⁹ The California Legislature enacted the Public Utilities Act which authorized the Commission to supervise and regulate every public utility in California and to do all things which are “necessary and convenient in the exercise of such power and jurisdiction.”¹⁰ Specifically, Article XII, Section 3 of the California Constitution provides that “the production, generation, transmission, or furnishing of heat, light, water, power” fall under the jurisdiction of the legislature. California Public Utilities statutes are enforced by the Commission.¹¹

Section 451 requires that rates, terms, and conditions of utility service must be just and reasonable.¹² Further, under Section 454.51, the Commission is entrusted with assuring that public utilities develop a portfolio of energy resources that assure the reliability of the state’s long-term electric supply.¹³ Section 8371 requires the Commission to facilitate the commercialization of microgrids.

Cost responsibility surcharges are the result of a litigated process in which the Commission has examined the costs associated with departing load, standby service, and new or incremental load service to determine the appropriate allocation of those costs to a customer to preserve fairness.

⁹ *Ford v. Pacific Gas & Electric Company* (1997) 60 Cal. App.4th 696, 700, citing to *San Diego Gas & Electric Company v. Superior Court*, (1996) 13 Cal. 4th 893, 914-915.

¹⁰ Section 701.

¹¹ Article XII, Section 5.

¹² Sections 451, 454 and 728.

¹³ Section 454.51, subds. (a) and (b).

Standby service charges are charged to customers who largely generate their own electricity on site to pay for the IOU's long-term investments to ensure that it can immediately supplement or substitute for the customer's own generation whenever needed. Standby service also applies to customers whose electricity supplies come from facilities other than the IOU if the generation source fails or is not available.

The IOUs have a legal obligation to provide service continuity. The IOU incurs capital costs and expenses such as procurement, resource adequacy, transmission, and distribution capacity to quickly provide such service.

3.1. Current Standby Charges Framework

Standby service is service paid for by customers who: (a) have load that is regularly and completely provided by facilities not owned or operated by an IOU; or (b) at times take auxiliary service from another public utility; or (c) require the investor-owned utility to provide reserve capacity and to always stand ready to supply electricity on an irregular or noncontinuous basis.

If a microgrid does not function as intended, the investor-owned utility must still provide capacity to serve those customer(s) and the IOU makes investments in the electric system to be ready to do so. For example, if a microgrid on a standby tariff experiences an outage at one or more of its generation or storage resources that was being used to serve load within the microgrid, the IOU must provide an adequate amount of backup power. That power requires labor, infrastructure, and fuel to deliver. Standby charges ensure that all benefitting customers pay their fair share of all the costs required to make power available to them safely and reliably. Below, we provide a general summary of the types of standby charges PG&E, SCE, and SDG&E have.

3.1.1. PG&E

PG&E assumes that microgrids supported by customer generators would fall under the supplemental standby (Mixed-Use) provision of PG&E's Tariff Schedule SB¹⁴ or would be 100 percent backup service.¹⁵ PG&E states that this backup service option is only employed for customer-generators who completely supply their own load requirements whenever they are operational (*e.g.*, wholesale power plants).¹⁶

Under a Mixed-Use application, a customer is typically supplied by a mix of power from the grid and their onsite generator and PG&E's Schedule SB acts as a rider rate to the customer's otherwise applicable rate schedule (OAS).¹⁷ PG&E customers are billed for all metered usage at the OAS and a Reservation Capacity Charge is added to the bill.¹⁸

PG&E also states that a Reactive Demand Charge may be included, if applicable.¹⁹ PG&E states that currently, all renewable generators qualifying for net energy metering pursuant to Section 2827, are exempt from standby charges.²⁰ Schedule SB also includes an exemption for solar generators one megawatt (1 Megawatt (MW)) or less that make no more than incidental export

¹⁴ PG&E Opening Comments at 8.

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.* at 8-9. The Reactive Demand Charge recovers the cost of maintaining desired system line voltage. If a customer generator fails to operate at or near unity power factor, then this may adversely impact PG&E's line voltage. PG&E must be compensated by installing equipment in order to maintain line voltage pursuant to PG&E's Rule 2

²⁰ *Id.*

to the grid.²¹ Fuel cell customers on schedule NEMFC who are on demand rate schedules as their OAS are also exempt from standby charges.²² A customer could also choose the Physically Assured Load Reduction (PALR) in order to avoid standby service and charges.²³

PG&E argues that any other standby charge waivers are not warranted outside those currently provided by existing statutes. Any other action resulting in further exemptions beyond existing provisions would create a cost shift that is expressly prohibited by SB 1339.

3.1.2. SCE

SCE's standby service rate schedules are applicable to customers who supply part or all their electrical requirements from a generating facility interconnected and operated in accordance with SCE's Rule 21, Wholesale Distribution Access Tariff, or Transmission Owners Tariff but who will require electric service from SCE's electrical system during periods of partial or complete outage of the customer's generating facility.²⁴

Illustratively, SCE offers the following standby tariff rates:²⁵

Category	Charge	Description
Fixed Charge ²³ <i>Id.</i>	Customer Charge	A fixed charge that does not vary based on registered usage or demand. This charge is identical to the customer charge applied to customers that do not have generation (i.e., an identical charge is found in the customer's otherwise applicable tariff).
Fixed Demand ²⁵ <i>Id.</i>	Capacity Reservation	A monthly charge based on the established Standby demand value. This charge is calculated by multiplying Standby demand value by the

Charges	Charge (CRC) – Standby (Backup) Demand (\$/kW)	applicable CRC price. The CRC is billed every month regardless of the maximum demand registered on the meter.
	Facilities Related Demand (FRD) Charge – Excess (Supplemental) Demand (\$/kW)	FRD charges apply year-round and are based on the maximum metered demand in excess of the customer's established Standby demand value in a billing period. The FRD charge is calculated by multiplying the excess demand by the applicable FRD price. When the maximum demand of the customer's operations does not exceed the established Standby demand value during a billing period, no FRD charges will be billed.
Time-related Demand Charges (metered)	Back-up Time-related Demand (TRD) Charge (\$/kW)	TRD charges apply year-round and are calculated per kW according to the highest recorded metered demand during summer On-Peak and winter Mid-Peak TOU periods, weekdays excluding weekends and holidays. Standby customers smaller than 500kW are then charged their OAT time-related demand charges on the metered demands.
	Supplemental TRD Charge (\$/kW)	For Standby customers larger than 500kW, the On-Peak and Mid-Peak maximum demands are properly identified as either Supplemental service or Backup service, with the end result producing four unique demand billing determinants as follows: On-Peak kW (Summer season only): (1) supplemental TRD charge; (2) Backup TRD charge. Mid-Peak kW (Winter season only): (1) supplemental TRD charge; and (2) backup TRD charge.
		Each of the four demand billing determinants are multiplied by a respective TRD price to determine monthly billed TRD charges. For customers sized at 500 kW and below, TRD charges are not differentiated between Supplemental service and Backup service.
Energy Charges (Metered)	Energy Charges (\$/kWh)	Energy Charges are monthly charges that, when applicable, may be differentiated by season, TOU period, voltage level, temperature and day/time. This charge is identical to the energy charges applied to customers that do not have generation (i.e., an identical charge is found in the customer's otherwise applicable tariff).

3.1.3. SDG&E

SDG&E's current standby tariff is designed to include two components: (1) a transmission standby charge and (2) a distribution standby charge.²⁶ Both components are designed to be recovered on a demand basis as a \$/kilowatt

²⁶ SDG&E Opening Comments at 13.

rate.²⁷ Customers do not pay standby charges during a grid outage.²⁸ The standby tariff is considered a “rider” tariff and is applied incrementally to the customer’s otherwise applicable tariff (OAT).²⁹ Depending upon the customer’s class type, the customer’s OAT may include a combination of customer, usage, and demand charges.³⁰

- A customer charge is typically a \$/meter/month application;
- A usage charge is typically a \$/kilowatt per hour application;
- A demand charge is a \$/kilowatt application.

Each customer class rate design is determined in the applicable general rate case (GRC) Phase Two or rate design window proceedings, which evaluate the utility’s rate design proposals.

Additionally, SDG&E’s Electric Energy Commodity Cost (EECC) tariff assesses the applicable usage and demand charges, reflecting the cost of providing commodity services to the relevant bundled customers.³¹ Combining the OAT, EECC, and Standby Tariffs, SDG&E applies the appropriate cost of services to each customer.³²

If a customer with onsite generation is subject to an OAT that includes a non-coincident demand charge, SDG&E performs a monthly review of the customer’s usage and standby-contracted demand to determine the appropriate

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.* at 14.

³² *Id.*

charges.³³ SDG&E sometimes performs a manual adjustment of their OAT charges to ensure the customer does not pay twice for the same service during periods where the onsite generation is unable to supply all of the customer's energy needs.³⁴ If a customer is on a NEM tariff, the NEM customer is exempted from standby charges, among other billing adjustments, and their OAT and EECC charges are assessed as applicable to the customer.³⁵

3.2. Waiving or Reducing Standby Charges for Behind-the-Meter Generation

Generally, in the Scoping Memo and Ruling,³⁶ parties were asked whether:

- the Commission should require the investor-owned utilities to waive or reduce standby charges for a customer operating a microgrid if certain conditions were met;
- what consequences may result if standby charges are waived or reduced; and
- if any waiver or reduction in standby charges are granted, should such exemption comply with the State of California's decarbonization requirements.

We summarize and discuss the parties' positions to these issues, below.

3.2.1. Party Positions

Generally, Bloom, Clean Coalition, CCDC, FCE, MRC, and Unison favor various waivers or reductions in standby charges for behind the meter generation microgrids. They offer the following reasons: (1) microgrids could step in when utilities "abandon their obligation to serve;" (2) microgrids offer holistic benefits including reducing pressure on needs for resource adequacy as

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ Assigned Commissioner's Amended Scoping Memo and Ruling, February 9, 2021.

well as reduces carbon emissions; and (3) standby charges do not compensate microgrids fairly for increased redundancy and resiliency.

First, MRC argues that the Commission should waive standby charges for microgrid customers because microgrids provide customers with the capability to provide backup services to utilities who conduct public safety power shutoffs.³⁷ More specifically MRC suggests that the Commission fully eliminate standby charges for microgrids below 5 MW in aggregate generation capability and that the Commission re-evaluate standby charges for all behind-the-meter distributed energy resources, and that in the interim the distribution component of the reservation charge be eliminated for all microgrids 5 MW or larger.³⁸

Bloom asserts that during grid outage conditions, microgrids can either island or export power to the grid³⁹ while also enabling some customers – like hospitals – to abandon their use of diesel generation and rely on cleaner microgrid technologies.⁴⁰ More specifically, Bloom asserts that reservation standby charges should be waived 100% based on if eligibility criteria are met: the median negative daily variation will not exceed 5% as compared to the median actual generation over a 12-month period, availability greater than 95%, and demonstrating a capacity factor greater than 85%.⁴¹ In short, these parties claim that it is unfair to charge microgrid customers various standby charges when the customer has invested in “self-reliance against outages.”⁴²

³⁷ MRC Opening Comments at 16-20; *see also* Unison Opening Comments at 6.

³⁸ *Id.* at 4.

³⁹ Bloom Opening Comments at 18, 21-22.

⁴⁰ *Id.* at 19-20.

⁴¹ *Id.* at 5-6.

⁴² MRC Opening Comments 16-20; *see also* Bloom at 19-20.

Second, the parties offer an array of claims that microgrids offer holistic benefits to the State, and such benefits necessitate that the Commission change its structure of standby charges. They claim microgrid services: (1) reduce the need for resource adequacy (including local resource adequacy) yet microgrids don't receive compensation in kind;⁴³ (2) deliver high predictability and reliability output;⁴⁴ (3) reduce grid congestion by reducing feeder load whose value likely offsets the difficulty of providing standby service on the feeder;⁴⁵ (4) reduce carbon emissions;⁴⁶ (5) reduce local air pollution;⁴⁷ (6) helps meet state renewable energy goals;⁴⁸ and (7) provide resiliency to communities' critical facilities.⁴⁹

Third, these parties claim that current-standby charge policy fails to properly assign costs. For example, Unison claims that generation and distribution costs are paid for twice by microgrid customers since increased demand charges are imposed when standby power is required.⁵⁰ Unison argued that all microgrids capable of long duration or indefinite islanding, should be exempt from standby reservation charges and any other non-bypassable charges.⁵¹ Bloom claims customers pay the cost of distribution infrastructure

⁴³ Bloom Opening Comments at 9; *see also* MRC Opening Comments at 6.

⁴⁴ *Id.* at 3-4.

⁴⁵ Bloom Energy Opening Comments at 10; CCDC Opening Comments at 3; and MRC Opening Comments at 6.

⁴⁶ CCDC Opening Comments at 9.

⁴⁷ Bloom Energy Opening Comments at 23-24.

⁴⁸ MRC Opening Comments at 6-7.

⁴⁹ MRC Opening Comments at 7.

⁵⁰ Unison Opening Comments at 5-6.

⁵¹ *Id.* at 3.

when paying utility service connection fees.⁵² CCDC and Unison assert that the design of the standby charge does not reward systems with increased redundancy, resulting in similar charges even if the generation is provided by multiple units.⁵³ MRC argues that a more appropriate starting point for determining the level of a standby charge is the customer's nomination of required backup rather than the maximum hourly peak demand.⁵⁴

However, many parties oppose a general waiver or exemption of standby charges. CEJA opposes a general waiver or reduction of standby charges for microgrids and asserts that if there are any future waivers or reductions of standby charges, it must be applied narrowly to benefit zero-emissions technologies rather than fossil fuel generation.⁵⁵ CEJA asserts that the Commission must promote zero-emission generation to meet California's objective of achieving 100 percent renewable electricity by 2045, and to improve air quality and health for disadvantaged communities.⁵⁶

CEJA also states that the Commission should ensure that our microgrid policy does not exacerbate existing inequities by facilitating "grid opt-out" by wealthier customers who have access to clean energy technologies.⁵⁷ CEJA argues such a policy allows wealthier communities to opt-out of participation in the grid (and the payment of non-bypassable charges), leaving lower-income

⁵² Bloom Energy Opening Comments at 5.

⁵³ CCDC Opening comments at 6; *see also* Unison Energy Opening Comments at 9-10.

⁵⁴ MRC Opening Comments at 18.

⁵⁵ CEJA Opening Comments at 2.

⁵⁶ *Id.* at 3.

⁵⁷ *Id.* at 6-7.

communities left to pay for the cost of the public grid.⁵⁸ CEJA argues this grid-opt out problem could put cost exemptions at odds with SB 1339's prohibition on cost shifting.⁵⁹

CEERT states that Track 3 should be carefully executed and resolved, using the opportunity to simultaneously meet the objectives of SB 1339 and California's clean energy and climate goals.⁶⁰ However, CEERT opposes the exemption of standby charges for microgrids.⁶¹

Cal Advocates argues that any suspension of standby charges for microgrids prior to a valuation of public benefit is unsupported, indirect, and unproven which could result in cost-shifting between customers classes in violation of SB 1339.⁶² Cal Advocates also argues that parties proposing to waive standby charges bear the burden to demonstrate that: (1) waiving standby charges would directly provide quantifiable benefits; and (2) a standby charge waiver is the most efficient and effective policy mechanism for realizing microgrid benefits for non-participants.⁶³

PG&E argues that the best approach to compensating microgrids for services that they provide is to identify, quantify, and, where appropriate, provide compensation for those services separate from the recovery of costs incurred by the utilities to provide standby services to the microgrids.⁶⁴ PG&E

⁵⁸ *Id.* at 6-7.

⁵⁹ *Id.*

⁶⁰ CEERT Opening Comments at 2.

⁶¹ *Id.*

⁶² Cal Advocates Opening Comments at 1.

⁶³ *Id.* at 2.

⁶⁴ PG&E Opening Comments at 2.

asserts that it is premature to consider a trade between reducing standby charges in exchange for resiliency or other purported microgrid benefits because these benefits have not been quantified and utility customers may in actuality over compensate certain microgrids through an exemption of standby charges.⁶⁵ PG&E also asserts that these benefits might be more appropriately compensated through non-rate mechanisms that do not have the effect of increasing costs outside of the community in which the microgrid is located.⁶⁶

SCE does not support waiving or reducing standby charges for customers operating a microgrid. Specifically, SCE asserts that standby charges are rooted in cost causation principles and should not be modified to incentivize a particular technology or configuration like a microgrid.⁶⁷ Alternatively, SCE argues that should microgrids deserve compensation for incremental benefits to nonparticipating customers, that compensation should take the form of a distinct payment.⁶⁸ Like PG&E, SCE argues that the incremental value microgrids provide to nonparticipating customers have not been quantified and parties cannot verify whether waiving or reducing standby charges would result in a cost shift prohibited by SB 1339.⁶⁹

SDG&E argues that unless a new customer with on-site generation commits to reducing its load simultaneously with, and in equal amount to, a reduction in generation output resulting in zero additional imports from the

⁶⁵ *Id.* at 4-7.

⁶⁶ *Id.* at 3.

⁶⁷ SCE Opening Comments at 4-5.

⁶⁸ *Id.* at 16.

⁶⁹ *Id.* at 2.

grid, there are no conditions for which standby charges should be waived.⁷⁰

SDG&E also argues that if the Commission were to exempt microgrid customers from standby charges, the costs imposed by those microgrid customers would be shifted to non-microgrid customers in direct violation of SB 1339.⁷¹ SDG&E reminds us that the Legislature made specific policy decisions to exempt certain customers from certain rate components or charges to support explicit goals, like meeting greenhouse gas (GHG) emissions reduction.⁷² SDG&E also points out that regardless of where microgrids are placed, in a wealthy community or a tech company's campus, or in a disadvantaged community, they have the potential to create benefits, such as reduced bills, for a subset of customers, at the expense of non-participating customers, if the appropriate cost of service is not applied.⁷³

3.2.2. For Eligible Microgrids, PG&E, SCE, and SDG&E Shall Revise Their Respective Retail Rate Schedules to Suspend the Capacity Reservation Component of Their Standby Charge.

In this decision, we determine whether it is appropriate to waive or reduce the utilities' standby charges for microgrids while not violating the cost shifting prohibition of SB 1339. Below, we summarize the legal contours that shape this proceeding.

Section 8371(b) requires the Commission to, without shifting costs between ratepayers, develop methods to reduce barriers for microgrid deployment. Section 8371(d) also requires the Commission to, without shifting costs between

⁷⁰ SDG&E Opening Comments at 6.

⁷¹ *Id.* at 7.

⁷² *Id.*

⁷³ *Id.* at 12.

ratepayers, develop separate large electrical corporation rates and tariffs, as necessary, to support microgrids, while ensuring that system, public, and worker safety are given the highest priority.

Section 8371(d) further states 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.

To comply with Section 8371(d), we must protect customers from inequitable cross-subsidies by separating customers' fair-share responsibility for a utility's cost of service from those who do not benefit from a resiliency technology, like a microgrid. Thus, our goal under Section 8371(d) is to ensure that non-participating microgrid customers remain indifferent.

Several intervening parties whose technologies could be used for microgrids advocate for either complete, blanket waivers or significant reductions of different components of the standby charge. A blanket waiver or reduction of standby charges would excessively burden the average California electric customer, in direct violation of Section 8371(d). A blanket waiver of standby charges for microgrids could also lead to unjustifiable cost-shifts for all distribution ratepayers.

Furthermore, the record upon which we consider the topic of waiving or reducing standby charges for microgrids shows that: (1) there are no facts to support a blanket waiver or reduction of standby charges; and (2) any blanket waiver or reduction of standby charges will inevitably shift costs to non-participating customers in direct violation to Section 8371. Therefore, we reject a blanket waiver of standby charges.

Instead, we adopt a suspension of the capacity reservation component of the utilities' standby charges. We use the term "capacity reservation charge" to refer to a monthly charge, in dollars per kilowatt, to reserve capacity for standby customers, regardless of how such a charge is named within each utility's tariff.⁷⁴ Although MRC⁷⁵ calls for much broader revisions to the investor-owned utilities' standby service charge tariffs, this is beyond the scope of this proceeding. MRC may litigate the general issue of rate design and cost allocation for standby service charges during each GRC Phase 2 or another proceeding. Next, we discuss the implementation and eligibility requirements for this suspension, below.

For microgrids that meet California Air Resources Board distributed generation criteria air pollution standards, PG&E, SCE, and SDG&E shall suspend the Capacity Reservation Component of their Standby Charge. Section 8371(b) requires the Commission to, without shifting costs between ratepayers, develop methods to reduce barriers for microgrid deployment. Section 8371(d) also requires the Commission to, *without shifting costs between ratepayers* (emphasis added), develop separate large electrical corporation rates and tariffs, as necessary, to support microgrids, while ensuring that system, public, and worker safety are given the highest priority. Section 8371(d) further states 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 are used pursuant to Section 41514.1 of the Health and Safety Code, or except for natural gas generation that is a distributed energy resource.

⁷⁴ PG&E uses the term "Reservation Charge Rate;" SCE uses the term "Capacity Reservation Charge;" and SDG&E uses the term "Contract Demand".

⁷⁵ MRC Opening Comments at 4 and 6.

We reject FCE and MRC's call for a blanket exemption of standby charges. There is insufficient information at this time to support the arguments that standby charges do not accurately reflect the cost to provide service or the broad resiliency value, they claim, some microgrids provide. We agree with Cal Advocates,⁷⁶ that resiliency addresses a need that is immediate and sporadic in nature while standby charges reflect long-term planning to address regular rate design. We are, however, inclined to test a more precise policy mechanism to assess whether certain technologies may be less costly to serve with standby power, thereby avoiding long-term cost shifts.

While the value of resiliency is scoped for Track 4, we find it reasonable to suspend the capacity reservation component of the standby charge for specific eligible microgrids that meet CARB distributed generation standards, which can demonstrate high availability and high reliability. Costs and data will be gathered to support an evaluation of this suspension. The evaluation shall be conducted in five years, 2026. This will support our understanding of the costs associated with certain microgrid technologies. The Commission, the utilities, and stakeholders can gain experience, learn lessons, collect data and information, and determine whether this suspension is fair and provides value to the public. This evaluation will also help us determine whether changes are needed to the suspension or the Demand Assurance Amount. We discuss the eligibility and implementation requirements, below.

First, we limit the suspension of the capacity reservation component of standby service charge to microgrids operating under retail tariffs and interconnected under Rule 21 that meet the California Air Resource Board's

⁷⁶ Cal Advocates Opening Comments at 9.

distributed generation criteria air pollution standards. Put another way, eligible microgrid projects must be comprised of distributed energy resources, such as an electric generators and/or storage technology, that each individually complies with the emissions standards adopted by the California Air Resource Board, pursuant to the distributed generation certification program requirements of Title 17 of the California Code of Regulations Section 94203 and/or its successor regulations. Diesel technologies are explicitly ineligible. This will ensure that we do not conflict with California's decarbonization laws, policies, and goals.

Moreover, such distributed generation technology meeting CARB criteria air pollution standards must also be able to prove at the time of application for the suspension, by manufacturer certification, that it has the capability to operate using a renewable fuel source, such as renewable natural gas, biogas, or green hydrogen, and make a commitment in the application to utilizing only renewable fuel sources, as reasonably practicable and feasible, by December 31, 2030.

Customers taking service under the rate schedule suspending the reservation capacity standby charge must submit the following information to the utility on their progress to transitioning to renewable fuels: (a) status of renewable fuel use by percentage at the time of the report and b) activities under way for procurement of renewable fuels for all use by the microgrid by December 31, 2030. Customers must submit this report to the utility January 1, 2025. The utility will then submit an aggregated report to the Commission in a Tier 1 Advice Letter by March 1, 2025.

Second, we limit the suspension of the capacity reservation component of the standby charge to eligible microgrid customers who meet the microgrid performance standards adopted by this decision. This means that for eligibility purposes, in addition to the requirements set forth above, the microgrid

customer must: (1) have a capacity factor⁷⁷ or self-supply factor⁷⁸ of greater than 85 percent; and (2) have an availability factor⁷⁹ greater than 95 percent.

Third, the microgrid customer must certify that it is designed to meet these microgrid performance standards by submitting the following information to the utility for compliance and certification purposes: (1) independently verified, reputable third-party bench test data over a shorter period of time, that when extrapolated, would meet the performance standards adopted by this decision; or (2) actual, real-time operating performance data from substantially similar equipment meeting performance standards adopted by this decision. If the candidate microgrid meets the microgrid performance standard requirements, then it will be eligible for this suspension program. However, the microgrid customer must recertify semi-annually, to the utility, that the microgrid is operating in compliance with the performance standard adopted by this decision. Failure to maintain semi-annual certification of the microgrid performance standards to the utility shall result in immediate termination from the standby charge suspension.

Fourth, the microgrid customer must not have received, or be expected to receive, an incentive payment through the Self-Generation Incentive Program unless it can demonstrate incremental benefit. This ensures ratepayers do not pay twice for the same benefit. However, the microgrid customer could

⁷⁷ Capacity factor refers to the unitless ratio of an actual electrical energy output over a given period of time to the maximum possible electrical energy output over that period.

⁷⁸ Self-supply factor refers to the unitless ratio of an actual electrical energy output from on-site generation over a given period of time to total electrical energy consumption over that period

⁷⁹ Availability factor refers to the percentage of time that a generating resource is available (or capable) to produce electricity. It will be calculated according to Institute of Electrical and Electronic Engineers (IEEE) Standard 762, "IEEE Standard Definitions for Use in Reporting Electric Generating Unit Reliability, Availability, and Productivity."

demonstrate that the operation of the microgrid would be functionally different than otherwise operated in absence of the waiver in order to still qualify.

Fifth, we decline to require the microgrid customer's physical separation from the utility distribution system in the event its microgrid generators are unable to serve load. Should the microgrid customer who is receiving the standby charge suspension suffer a generation failure, or cannot serve its load, it may rely on the utility's system. In exchange for the ability to rely on the grid in these unique instances, the microgrid customer shall pay, directly to the utility, a Demand Assurance Amount for the service the utility system provides during its generation failure. To be clear, if a customer enters into a physical assurance agreement with the utility, then the Demand Assurance Amount does not apply. Thus, Demand Assurance Amount shall apply when:

- The customer's demand exceeds the contracted demand, then the customer is contractually obligated to pay the Demand Assurance Amount; and
- The Demand Assurance Amount is assessed at two times the tariffed capacity reservation charge that would have applied in the absence of the waiver, during the month that the contracted demand was exceeded.⁸⁰

We adopt the Demand Assurance Amount for reliance on the utility system to ensure that in the unlikely event that there is a unique instance of a microgrid customer needing to utilize the grid, there is an assurance that the

⁸⁰ In other words, for any month in which the customer's demand is below the capacity reservation amount, measured in kilowatts, the customer will pay no capacity reservation charge. For any month in which the customer's demand exceeds the capacity reservation amount, the customer will pay two times the capacity reservation charge, measured in dollars per kilowatt. The underlying methodology by which the utility establishes the capacity reservation amount for a customer receiving standby service, assesses customer demand, and calculates the capacity reservation charge that is the basis for the Demand Assurance Amount, will remain unchanged.

utility is compensated for the use and helps prevent risk to public safety and public infrastructure integrity. Again, should a customer enter into a physical assurance agreement with the utility, the Demand Assurance Amount does not apply.

We agree with both PG&E⁸¹ and SCE⁸² that utility system integrity would be jeopardized without some assurance protection. We agree with SCE that no generation is truly 100 percent reliable and without some assurance from the microgrid customer, should its generator fail, the utility's system could:

(a) become overloaded, jeopardizing utility equipment, causing equipment damage; (b) trigger a broader outage; (c) and create a risk to public safety.⁸³ We also agree with Cal Advocates that ratepayers should not be financially responsible for providing electrical service to customers taking service under the rate schedule suspending the reservation capacity standby charge.⁸⁴ Further, to minimize impacts to the utility system, microgrid customers that take service under a rate schedule suspending the reservation capacity standby charge shall notify the applicable utility at least five business days in advance of any planned outage (*e.g.*, maintenance) of the microgrid. The goal of the Demand Assurance Amount is to preserve the integrity of the ratepayer utility system and to ensure adequate financial support of the ratepayer utility system.

We direct PG&E, SCE, and SDG&E to each file Tier 1 Advice Letters within 30 days of the effective date of this decision that establish a two-way balancing account to track PG&E, SCE and SDG&E the costs associated with the

⁸¹ PG&E Reply Comments at 13.

⁸² SCE Reply Comments at 2.

⁸³ *Id.*

⁸⁴ Cal Advocates Reply Comments at 2-3.

suspension of the capacity reservation component of the standby charge. Revenue shortfalls are pre-approved for ratepayer recovery in distribution rates using standard distribution cost allocation factors. PG&E, SCE and SDG&E shall title this two-way balancing account the "Microgrid Reservation Capacity Component-Standby Charge Suspension Account." This two-way balancing account shall record the difference in revenue collected from customers who qualify for the suspension as compared to the revenue that would have been collected had they not been eligible for the suspension. Any incremental costs associated with implementing the decision shall be recorded in a separate sub-account of the two-way balancing account. For example, this may include the additional costs associated with billing system changes and administration of the new rate structure. This two-way balancing account shall be effective from the effective date of the Tier 1 Advice Letter. In 2026, the Commission will evaluate the effectiveness of this reservation capacity standby charge suspension and the adequacy of the Demand Assurance Amount

Additionally, PG&E, SCE, and SDG&E shall also track the revenue received from the Demand Assurance Amount should a customer's microgrid generation fail or be insufficient to meet its demand, and the microgrid customer relies on the utility to provide its electric service. PG&E, SCE, and SDG&E shall track the revenue received from the Demand Assurance Amount in a subaccount within the Microgrid Capacity Reservation Component-Standby Charge Suspension Account, called the "Demand Assurance Amount Account."

Additionally, PG&E, SCE, and SDG&E shall also track the costs associated with implementing this decision in a separate subaccount of the two-way balancing account. PG&E, SCE, and SDG&E shall establish these subaccounts in the same Tier 1 Advice Letter discussed above. Recovery of the balances in the two-way

balancing account will be annually through each utility's electric rate true-up advice letter filings.

Next, we direct PG&E, SCE, and SDG&E to file Tier 2 Advice Letters, within 90 days upon the effective date of this decision, that revises applicable tariff documents related to the provisions of standby service to comply with Section 3.2.2 of this decision. This includes revising all rate schedules, agreements, and forms to comply with Section 3.2.2 of this decision. The revisions to tariff documents included in this Tier 2 Advice Letter shall:

- Define “Low Variability Microgrid Standby Customer” as a customer who operates a microgrid interconnected under Rule 21 and under a retail tariff where the microgrid's generation and storage resources meet the following performance standards, including resources that use natural gas as a fuel:
 - Variability:
 - Capacity Factor of the microgrid as a whole is greater than 85 percent or Self-Supply Factor of the microgrid as a whole is greater than 85 percent; and
 - Availability of the microgrid as a whole is greater than 95 percent.
 - Emissions:
 - Non-renewable microgrid resources shall each individually comply with the emissions standards adopted by the State Air Resources Board pursuant to the distributed generation certification program requirements of Section 94203 of Title 17 of the California Code of Regulations, or any successor regulation, regardless of if the resource is required to obtain certification pursuant to the CARB distributed generation program;
 - Non-renewable resources have the technical capacity to operate using at least one renewable fuel, such as,

but not limited to, renewable natural gas, biogas, and green hydrogen at the time of application for the suspension.

- Microgrid customers utilizing non-renewable resources must bindingly commit, at the time of application for the suspension, to converting to, and exclusively utilizing renewable fuels by December 31, 2030, if reasonably feasible and practicable. A progress report on activities to meet this commitment must be submitted by January 1, 2025.
- Define the following terms:
 - Capacity Factor: ratio of energy actually produced by a generating unit to the maximum amount of energy it could produce over the course of a year;
 - Self-Supply Factor: ratio of electricity actually produced by the customer's microgrid to the total amount of electricity consumed at the customer's site, regardless of source, over the course of a year;
 - Availability: the number of hours a resource is either producing electricity or available to produce electricity divided by the total hours in a year; and
 - Non-renewable resources: resources that are not defined as renewable in the latest version of the California Energy Commission's (CEC's) Renewables Portfolio Standard (RPS) Eligibility Guidebook and the Overall Program Guidebook.
- Describe the documentation required for a customer to demonstrate eligibility for treatment as a Low Variability Microgrid Standby Customer, consistent with the following:
 - The microgrid customer must not be required to demonstrate how they would physically separate their system from the utility distribution system or reduce load in the event their on-site microgrid generators are unable to serve load and in order to prevent their load

from being served by the utility distribution system and avoid overloading the utility system;

- For demonstrating compliance with the microgrid performance criteria, utilities must accept independently verified, reputable third-party bench test data over a shorter time period that when extrapolated would meet the performance standards adopted by this decision or actual, real-time operating performance data from substantially similar equipment meeting the performance standards adopted by this decision, and actual real-time operating performance data documenting that the microgrid customer's operation of the microgrid continues to comply with the performance standards semi-annually thereafter;
- For demonstrating compliance with the first emissions criterion, stated above, utilities must accept independently verified, reputable third-party bench test data meeting the emissions standards or certification from CARB;
- For demonstrating compliance with the second emissions criterion stated above, utilities must accept the manufacturer's credible documentation of the ability of the equipment to operate using one or more renewable fuels while meeting all applicable performance standards; and
- For demonstrating compliance with the third emissions criterion stated above, language stating the customer's commitment for its microgrid to use renewable fuel by December 31, 2030, if reasonably practicable and feasible. Customer must submit a progress report to the utilities on their activities to meet this commitment by January 1, 2025.
- Suspend the capacity reservation charge component, in its entirety, of all standby charges for all Low Variability Microgrid Standby Customers.

- Add a Demand Assurance Amount applicable to all Low Variability Microgrid Standby Customers, consistent with the following:
 - For capacity used in any month that exceeds the reservation capacity, an excess demand charge shall be imposed at two times the tariffed capacity reservation charge that would have applied in the absence of the waiver during the month that the reservation capacity was exceeded.
 - The utility shall set the capacity reservation amount at the maximum expected demand in excess of the demand regularly served by the utility based on the best available information. In determining the maximum expected demand, the utility should consider the documentation provided by the customer to satisfy the performance criteria required by this decision.
- All other terms and charges shall remain unchanged.

4. Conclusion

This decision directs PG&E, SCE, and SDG&E to provide rate schedule(s) that suspend the capacity reservation component of their standby charge for eligible microgrids that meet the CARB air pollution standards for generation. This suspension period will allow the Commission and stakeholders to ascertain the costs that the utilities incur to provide standby service to microgrids. .

5. Comments on Proposed Decision

The proposed decision of ALJ Colin Rizzo in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on June 28 and 29, 2021 by: (1) Applied Medical Resources Corporation; (2) Bloom Energy Corporation; (3) California Clean DG Coalition; (4) Center for Energy Efficiency and Renewable Technologies; (5) Clean Coalition; (6) Doosan Fuel Cell America, Inc.; (7) Energy

Producers and Users Coalition; (8) FuelCell Energy, Inc.; (9) Microgrid Resources Coalition; (10) National Fuel Cell Research Center; (11) Public Advocates Office; (12) Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company; (13) Southern California Gas Company; and (14) Unison Energy, LLC.

Reply comments were filed on July 6, 2021 by: (1) Bloom Energy Corporation; (2) California DG Coalition; (3) California Hydrogen Business Council; (4) California Hydrogen Business Council; (5) Center for Energy Efficiency and Renewable Technologies; (6) Clean Coalition; (7) Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company; (8) Public Advocates Office; (9) Small Business Utility Advocates; and (10) Southern California Gas Company.

We have carefully considered the suggested changes proposed by parties in their comments and their reply comments to this Decision. The suggested changes that we have accepted are reflected in the revised version of this decision.

6. Assignment of Proceeding

Genevieve Shiroma is the assigned Commissioner and Colin Rizzo is the assigned ALJ in this proceeding.

Findings of Fact

1. The investor-owned utilities have an obligation to provide service continuity.
2. Standby charges cover the investor-owned utility's capital costs and expenses such as procurement, resource adequacy, transmission, and distribution capacity to quickly provide electrical service when needed.

3. Standby service also supplies customers whose electricity comes from facilities other than the investor-owned utility if their generation source fails or is not available.

4. Standby service is service paid for by customers: (a) whose load is regularly and completely provided by facilities not owned or operated by an investor-owned utility; or (b) who at times take auxiliary service from another public utility; or (c) who require the investor-owned utility to provide reserve capacity and to always stand ready to supply electricity on an irregular or noncontinuous basis.

5. Under the standby service paradigm, if a microgrid does not function as intended, the investor-owned utility must still provide capacity to serve that customer and the investor-owned utility makes investments in the electric system to be ready to do so.

6. If a microgrid on a standby tariff experiences an outage at one or more of its generation or storage resources that was being used to serve load within the microgrid, the investor-owned utility provides backup power.

7. Standby charges ensure that all benefitting customers pay their fair share of all the costs required to make electricity available to them, safely and reliably.

8. PG&E, SCE, and SDG&E each have their own standby charge rate design structures.

9. A suspension of the capacity reservation component of the standby charge for eligible microgrids with distributed generation technologies that each individually meet CARB emission standards is appropriate so the Commission and stakeholders can publicly ascertain the costs utilities incur to provide standby service to these microgrid projects.

10. It is appropriate to limit technologies that are eligible for a suspension of the capacity reservation component of the standby charge to those that meet CARB's distributed generation criteria air pollution standards.

11. Limiting eligibility for a suspension of the capacity reservation component to the standby charge to those microgrid customers that have not received and are not expected to receive an incentive payment through the Self-Generation Incentive Program protects ratepayers from paying twice for the same benefit.

12. Diesel fuel resources do not qualify for this suspension of the capacity reservation component of the standby charge because the resource conflicts with California's long-term decarbonization goals.

13. Unless a microgrid technology can: (1) prove at the time of application for the suspension, by manufacturer certification, that it has the capability and commits to operating, as reasonably practicable and feasible, using at least a 100 percent renewable fuel, like, but not limited to, renewable natural gas, biogas, or green hydrogen by December 31, 2030; (2) meet specified and independently verified microgrid performance standards; and (3) recertify on a semi-annual basis that it continues to meet those microgrid performance standards, it does not provide sufficient value to the system to justify eligibility for suspension of the capacity reservation component of the standby charge.

14. If a microgrid customer receiving the capacity reservation component suspension suffers a generation failure or cannot serve its load, it will rely on the utility system and compensate the utility for that reliance by paying a Demand Assurance Amount.

15. The Demand Assurance Amount provides compensation from the microgrid customer directly to the utility when the microgrid customer's demand exceeds the contracted demand.

16. A Demand Assurance Amount of two times the tariffed capacity reservation charge that would have applied in the absence of the suspension, during the month that the contracted demand was exceeded, ensures that the utility receives an equal exchange from the microgrid customer's reliance on the utility system if the microgrid's generation fails or the microgrid cannot serve its load. To minimize impacts to the utility system, microgrid customers receiving the capacity reservation component suspension shall notify the applicable utility at least five business days in advance of any planned outage (*e.g.*, maintenance) of the microgrid.

17. The Demand Assurance Amount must be paid on a monthly basis, so any month in which reservation capacity is exceeded, the microgrid customer pays the Demand Assurance Amount.

Conclusions of Law

1. It is unreasonable to grant a blanket waiver of standby charges because there is insufficient evidence that such a waiver would not unfairly shift costs to non-participating customers.

2. It is reasonable to grant a suspension of the capacity reservation component of the standby charge for eligible microgrids operating under retail tariffs and interconnected under Rule 21 that meet CARB's distributed criteria air pollution standards so the Commission and stakeholders can ascertain the difference in the costs certain microgrid projects cause the utilities to incur relative to other types of projects.

3. It is reasonable to limit eligibility to the suspension of the capacity reservation component of the standby charge to microgrid technologies that each individually meet CARB's distributed generation criteria air pollution standards.

4. It is reasonable to exclude diesel fuel resources from this suspension of the capacity reservation component of the standby charge because the resource conflicts with California's decarbonization laws and must only be used as a last resort.

5. It is reasonable to limit eligibility for suspension of the capacity reservation component of the standby charge to those microgrid customers that have not received, or are expected to receive, an incentive payment through the Self-Generation Incentive Program – unless they demonstrate incremental benefit – so ratepayers do not pay twice for the same benefit.

6. It is reasonable to limit eligibility for the suspension of the capacity reservation component of the standby charge to microgrid generation resources that prove at the time of application for the suspension, by manufacturer certification, that they have the capability to, and commit to, operating using 100 percent renewable fuel, as reasonably practicable and feasible, including but not limited to, renewable natural gas, biogas, or green hydrogen by December 31, 2030.

7. It is reasonable to limit eligibility for the suspension of the capacity reservation component of the standby charge to microgrids that meet the following performance standards: (1) have a capacity factor of greater than 85 percent or self-supply factor of greater than 85 percent and; (2) have an availability of greater than 95 percent.

8. It is reasonable to require eligible microgrid to certify the microgrid is designed to meet the performance standards in Conclusion of Law 7 by providing the utility: (1) independently verified, reputable third-party bench test data over a shorter time period that, when extrapolated, would meet the microgrid performance standards adopted by this decision; or (2) actual,

real-time operating performance data from substantially similar equipment meeting the performance standards adopted by this decision, at the time of the interconnection application.

9. It is reasonable to require eligible microgrid to recertify semi-annually to the utility that they are maintaining compliance with the microgrid performance standards, and to require that the utility will terminate them from the capacity reservation component suspension if they do not.

10. It is reasonable to require a microgrid customer to pay a Demand Assurance Amount if the microgrid customer must rely on the utility system when the microgrid suffers a generation failure or cannot serve its load.

11. It is reasonable to require the microgrid customer to directly pay the utility the Demand Assurance Amount when the microgrid customer's demand exceeds the contracted demand.

12. It is reasonable to assess the Demand Assurance Amount at two times the tariffed capacity reservation charge that would have applied in the absence of the suspension, during the month that the contracted demand was exceeded.

13. It is reasonable to require microgrid customers who are receiving the capacity reservation component suspension to notify the applicable utility at least five business days in advance of any planned outage (*e.g.*, maintenance) of the microgrid.

14. It is reasonable for PG&E, SCE, and SDG&E each to establish a two-way balancing account to track the costs associated with the suspension of the capacity reservation component of the standby charge, and to track the revenue received from the Demand Assurance Amount.

15. It is reasonable for PG&E, SCE, and SDG&E to record the costs associated with implementing this decision in a separate sub-account of the two-way

balancing account and to recover those costs through annual electric true-up advice letter filings.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall each file Tier 1 Advice Letters, within 30 days upon the effective date of this decision, that establishes a two-way balancing account to ensure PG&E, SCE and SDG&E track the costs associated with the suspension of the capacity reservation component of the standby charge. Revenue shortfalls are pre-approved for ratepayer recovery in distribution rate using standard distribution cost allocation factors. PG&E, SCE and SDG&E shall title this two-way balancing account the “Microgrid Reservation Capacity Component-Standby Charge Suspension Account.” This two-way balancing account shall record the difference in revenue collected from customers who qualify for the suspension as compared to the revenue that would have been collected had they not been eligible for the suspension. This two-way balancing account shall also, in a separate sub-account, record any incremental costs associated with implementing the decision. This two-way balancing account shall be effective from the effective date of the Tier 1 Advice Letter. In 2026, the Commission shall evaluate the effectiveness of this reservation component standby charge suspension and the adequacy of the Demand Assurance Amount. Additionally, PG&E, SCE and SDG&E shall also track the revenue received from the Demand Assurance Amount should a microgrid’s generation fail or be insufficient to meet its demand, and the microgrid customer relies on the utility to keep the lights on for its customer. PG&E, SCE and SDG&E shall track the revenue received from the Demand

Assurance Amount in a subaccount within the Microgrid Capacity Reservation Component-Standby Charge Suspension Account, called the “Demand Assurance Amount Account.” Additionally, PG&E, SCE, and SDG&E shall also record the costs associated with implementing this decision in a separate subaccount of the two-way balancing account. PG&E, SCE and SDG&E shall establish these subaccounts in the same Tier 1 Advice Letter that establishes the two-way balancing account. Recovery of the balances in the two-way balancing account will be annually through each utility’s electric rate true-up advice letter filings.

2. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall each file Tier 2 Advice Letters, within 90 days upon the effective date of this decision, that revise all applicable retail tariff documents related to the provisions of standby service to comply with Section 3.2.2 of this decision. This includes revising all retail rate schedules, agreements, and forms to comply with Section 3.2.2 of this decision. The revisions to tariff documents included in this Tier 2 Advice Letter shall, in the appropriate documents:

- Define “Low Variability Microgrid Standby Customer” as a customer who operates a microgrid interconnected under Rule 21 and under a retail tariff where the microgrid’s generation and storage resources meet the following performance standards, including resources that use natural gas as a fuel:
 - Variability:
 - Capacity Factor of the microgrid as a whole is greater than 85 percent or Self-Supply Factor of the microgrid as a whole is greater than 85 percent; and
 - Availability of the microgrid as a whole is greater than 95 percent.

- Emissions:
 - Non-renewable microgrid resources shall each individually comply with the emissions standards adopted by the State Air Resources Board pursuant to the distributed generation certification program requirements of Section 94203 of Title 17 of the California Code of Regulations, or any successor regulation, regardless of if the resource is required to obtain certification, pursuant to the California Air Resources Board (CARB) distributed generation program;
 - Non-renewable resources have the technical capacity to operate using at least one renewable fuel, such as, but not limited to, renewable natural gas, biogas, and green hydrogen by at the time of application for the suspension.
 - Microgrid customers utilizing non-renewable resources must commit the time of application for the suspension to converting to and exclusively utilizing renewable fuels, as reasonably feasible and practicable, by December 31, 2030.
 - Microgrid customers utilizing non-renewable resources must submit the following information to the utility on their progress to transitioning to renewable fuels: a) status of renewable fuel use by percentage at the time of the report and b) activities under way for procurement of renewable fuels for all use by the microgrid by December 31, 2030. Customers must submit this report to the utility by January 1, 2025. The utility will then submit an aggregated report to the Commission in a Tier 1 Advice Letter by March 1, 2025.
- Define the following terms:
 - Capacity Factor: ratio of energy actually produced by a generating unit to the maximum amount of energy it could produce over the course of a year;

- Self-Supply Factor: ratio of electricity actually produced by the customer's microgrid to the total amount of electricity consumed at the customer's site, regardless of source, over the course of a year;
 - Availability: the number of hours a resource is producing electricity or available to produce electricity divided by the total hours in a year; and
 - Non-renewable resources: resources that are not defined as renewable in the latest version of the California Energy Commission's Renewables Portfolio Standard Eligibility Guidebook and the Overall Program Guidebook.
- Describe the documentation required for a customer to demonstrate eligibility for treatment as a Low Variability Microgrid Standby Customer, consistent with the following:
 - The microgrid customer must not be required to demonstrate how they would physically separate their system from the utility distribution system or reduce load in the event their on-site microgrid generators are unable to serve load and in order to prevent their load from being served by the utility distribution system and avoid overloading the utility system;
 - For demonstrating compliance with the microgrid performance criteria, utilities must accept independently verified, reputable third-party bench test data over a shorter time period that when extrapolated would meet the performance standards adopted by this decision or actual, real-time operating performance data from substantially similar equipment meeting the performance standards adopted by this decision, and actual real-time operating performance data documenting that the microgrid customer's operation of the microgrid continues to comply with the microgrid performance standards semi-annually thereafter;

- For demonstrating compliance with the first emissions criterion, stated above, utilities must accept independently verified, reputable third-party bench test data meeting the emissions standards or certification from CARB; and
- For demonstrating compliance with the second emissions criterion stated above, utilities must accept the manufacturer's credible documentation of the ability of the equipment to operate using one or more renewable fuels while meeting all applicable performance standards; and
- For demonstrating compliance with the third emissions criterion stated above, Microgrid customers utilizing non-renewable resources must submit the following information to the utility on their progress to transitioning to renewable fuels: a) status of renewable fuel use by percentage at the time of the report and b) activities under way for procurement of renewable fuels for all use by the microgrid by December 31, 2030. Customers must submit this report to the utility by January 1, 2025. The utility will then submit an aggregated report to the Commission in a Tier 1 advice letter by March 1, 2025.
- Suspend the capacity reservation charge component, in its entirety, of all standby charges for all Low Variability Microgrid Standby Customers.
- Add a Demand Assurance Amount applicable to all Low Variability Microgrid Standby Customers, consistent with the following:
 - For capacity used in any month that exceeds the reservation capacity, an excess demand charge shall be imposed at two times the tariffed capacity reservation charge that would have applied in the absence of the waiver during the month that the reservation capacity was exceeded.

- The utility shall set the capacity reservation amount at the maximum expected demand in excess of the demand regularly served by the utility based on the best available information. In determining the maximum expected demand, the utility should consider the documentation provided by the customer to satisfy the performance criteria required by this decision.
- Require microgrid customers receiving the capacity reservation component suspension to notify the utility at least five business days in advance of any planned outage (*e.g.*, maintenance) of the microgrid.
- All other terms and charges shall remain unchanged.

3. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall each, within six (6) months of the effective date of the suspension and semi-annually thereafter, file Tier 1 Advice Letters that detail: (1) the number of microgrids that have enrolled in the suspension program; and (2) the estimated capacity in megawatts of those microgrids.

4. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall immediately terminate any microgrid customer for non-compliance with any of the requirements of Section 3.2.2 of this decision from the reservation capacity component suspension of the standby charge.

5. Rulemaking 19-09-009 remains open.

This order is effective today.

Dated July 15, 2021, at San Francisco, California.

MARYBEL BATJER

President

MARTHA GUZMAN ACEVES

CLIFFORD RECHTSCHAFFEN

GENEVIEVE SHIROMA

DARCIE HOUCK

Commissioners