PUBLIC UTILITIES COMMISSION 505 Van Ness Avenue San Francisco CA 94102-3298



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August 17, 2020

Advice 5918-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

<u>Subject:</u> Implementation Plan for Community Microgrid Enablement Program in Compliance with D.20-06-017

I. <u>Purpose</u>

Pacific Gas and Electric Company ("PG&E") hereby submits this Tier 2 Advice Letter ("AL") in compliance with the California Public Utilities Commission ("CPUC" or "Commission") Decision ("D.") 20-06-017 ("Decision") Ordering Paragraph ("OP") 17. The AL describes implementation details regarding program scope, project applicability and eligibility criteria including, but not limited to the content included in Section 4.3.4.1 and all the requirements listed in Section 5.1.2 of the Decision.

II. Background

The Commission initiated Rulemaking ("R.") 19-09-009 ("Microgrid OIR") to develop a policy framework surrounding the commercialization of microgrids and related resiliency strategies and to implement Senate Bill (SB) 1339 (Stern, 2018).

On December 20, 2019 the assigned Commissioner's Scoping Memo and Ruling was issued, adopting a scope and schedule for Track 1 of the proceeding. Track 1 addressed deploying resiliency planning in areas that are prone to outage events and wildfires, with the goal of establishing key microgrid and resiliency strategies as soon as possible. Subsequently, on January 21, 2020, PG&E filed its *Track 1 Proposal Addressing Immediate Resiliency Strategies for Outages*. As part of that proposal, PG&E sought approval for a Community Microgrid Enablement Program ("CMEP") to provide incremental technical and financial support on a prioritized basis for community requested microgrids for Public Safety Power Shutoff ("PSPS") mitigation purposes.

On June 11, 2020, the Commission adopted D.20-06-017, which approves PG&E's CMEP as set forth in PG&E's proposal, subject to five additional program design elements and requirements. First, the Commission directed that eligibility for CMEP be expanded to all areas prone to all outage events, not just Tier 2 and 3 High Fire Threat Districts

(HFTDs).¹ Second, it directed that PG&E incorporate criteria to prioritize vulnerable communities and customers with access and functional needs that apply for CMEP funds.² Third, it approved PG&E to expand the scope to include technical support and guidance for local and tribal governments and Community Choice Aggregators (CCAs) to design and engineer behind-the-meter microgrids, in preparation for the upcoming 2020 fire season and beyond.³ Fourth, it directed that PG&E inform the development of CMEP implementation details by addressing certain questions.⁴ Finally, it directed that PG&E meet and confer with stakeholders to solicit input from local and tribal governments and CCAs to refine the program's scope, eligibility, and fund matching applicability.⁵ The Commission also deferred cost recovery for the CMEP to a separate application or a future General Rate Case, allowing the costs to be tracked in a new Microgrid Memorandum Account in the meantime.⁶

III. Report on Outreach Conducted to Solicit Input on Program Design

Local and Tribal Government, and CCA Workshops

PG&E conducted a series of interactive workshops in early July to solicit input on the design of the CMEP from local and tribal governments and CCAs. PG&E scheduled a series of five workshops across three days in order to enable broad participation. Vendors, contractors, and other interested stakeholders were also invited to attend one of the sessions. The sessions were facilitated by a third-party with expertise in conducting interactive workshops to gain customer insights.

PG&E sought feedback on the design of program elements such as the Enhanced Technical Support and cost offsets, the program eligibility and prioritization criteria, including prioritization for disadvantaged and vulnerable populations, and the application process. The facilitator used a combination of discussion, polling, and targeted questions to elicit relevant feedback from participants. After the sessions, the facilitator followed up with an email to provide participants with an additional opportunity for program feedback after having had an opportunity to reflect on the information provided.

The participants provided robust feedback, which is summarized in Appendix 1. Appendix 1 contains both the final report from the third-party which conducted the workshops, as well as a synthesis of stakeholder input and its corresponding impact on the design of the program. PG&E appreciates the contributions that participants made to helping shape a

¹ D.20-06-017, p. 85.

² *Id*.

 $^{^3}$ Id

⁴ *Id.*, pp. 86-87. These questions and PG&E's responses to them are provided in Appendix 6 to this Advice Letter.

⁵ *Id.*, p. 86.

⁶ *Id.*, pp. 130-131 (OP 16). The creation of the Microgrid Memorandum Account, including the CMEP sub-account, is the subject of a separate Advice Letter submitted on July 17, 2020.

better CMEP. The meeting minutes, attendee lists, and agendas are provided in Appendix 2.

Meetings to Solicit Input on Prioritization for Disadvantaged Communities (DACs) and Vulnerable Communities

In addition to meeting with local and tribal government leaders and CCAs, PG&E sought the input of environmental justice groups, and groups who advocate on behalf of disadvantaged, low-income, and vulnerable populations. PG&E met with several such groups and received valuable feedback which influenced the design of the program. The summary of those meetings is provided in Appendix 3.

Stakeholder feedback has been incorporated into the design of the CMEP, including staffing requirements described in Section IV, cost offsets for eligible projects described in Section V.D, and prioritization of projects described in Section VII, below.

IV. <u>Compliance with Decision Section 4.3.4.1</u>

Section 4.3.4.1 of D.20-06-017 directs Southern California Edison Company ("SCE") and San Diego Gas & Electric Company ("SDG&E") to dedicate staff to their distribution planning teams that specialize in resiliency project development for local jurisdictions. That section states: "We decline to adopt Proposal 3 for PG&E because of the significant overlap, and potential for duplication, between Staff Proposal 3 and PG&E's proposed Community Microgrid Enablement Program." Later in the Decision, the CPUC directs PG&E to describe how it will implement as part of its CMEP the content required by the Local Governments Proposal 3 for the other investor-owned utilities ("IOUs") in section 4.3.4.1 of the Decision.⁸ This section provides that response.

PG&E will implement in its operations a new community resilience function in 2020 and 2021, focused on providing technical support and project management for eligible projects. The support provided is described in the CMEP Scope section of this advice letter. PG&E provides answers to the specific questions posed in section 4.3.4.1 below.

How will the utility implement the following in compliance with the decision?

Providing advice and guidance before planning and proposal development begins –
As described in the CMEP Scope section of this document, PG&E will provide
Enhanced Technical Support to community-driven resilience projects. In the initial
vetting stage, before planning and proposal development begins, PG&E will help
customers understand their options and will share basic grid characteristics in the area
that may impact the extent of likely upgrades needed under different scenarios. This
support will be applicable to any type of community-driven Critical Facility resilience
request.

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⁷ D.20-06-017, p. 61.

⁸ *Id.*, p. 87.

- Prioritizing projects to ensure that resources are directed to the most urgent for public health, safety, and public interest – PG&E will prioritize those projects which are most urgent for public health, safety, and public interest through an assessment of the urgency of the threat, the timeliness / executability of the solution, and the potential impact to communities. Please see the Prioritization section of this Advice Letter for further details.
- Assisting the local jurisdictions with consulting advice on the types of resiliency projects that can be expedited through the permitting and interconnection process In the initial vetting stage of CMEP's Enhanced Technical Support, PG&E will help customers understand their options, and will discuss the relative complexity of various options based on the stated goals, needs, and characteristics of the community project. In this way, local jurisdictions will have a more informed understanding of the relative complexity and speed with which various types of resiliency projects may be developed.
- Providing pre-project information about load points, customer connectivity, load profiles, and the relevant maps and infrastructure data to facilitate local jurisdiction planning – Please see the Vetting and Solution Assessment stage descriptions of CMEP Enhanced Technical Support in the CMEP Scope section of this Advice Letter.
- What, if any, staffing requirements are necessary to establish such a team PG&E acknowledges that it is building a largely unprecedented program and will seek to flexibly adapt as experience is gained. PG&E currently anticipates that up to 10-12 personnel may be necessary to successfully implement the overall CMEP program and accomplish the Enhanced Technical Support for resiliency project development described in this advice letter. The roles are expected to include:
 - Overall CMEP Program Manager One full-time equivalent position (FTE) will be required for overall CMEP management and ensuring appropriate coordination and integration with other PG&E programs and processes.
 - Disadvantaged and Vulnerable Communities Focus PG&E is prioritizing Disadvantaged and Vulnerable Communities and recognizes the need to ensure that appropriate focus and outreach are provided to Disadvantaged and Vulnerable Communities. PG&E's preference is a partnership model, wherein PG&E works with and through community-based organizations (CBOs) to enable this priority. PG&E anticipates that the Overall CMEP Program Manager can best ensure that Disadvantaged and Vulnerable Communities are prioritized and can implement the partnership model. However, PG&E is retaining the budget flexibility to hire dedicated resources to specifically address this need, if necessary.
 - Resilience Project Engagement Team PG&E would assign each eligible project, subject to resource constraints: one Resilience Solution Integrator to provide technical solution support; one Resilience Specialist to provide project management and overall facilitation through PG&E processes relevant to

project development; and one Community Microgrid Design Specialist to facilitate technical microgrid solution development. While PG&E anticipates using the CMEP expense budget authorization to hire up to 11 FTEs to fill such roles, the exact number and the allocation across the roles will be determined based upon customer demand and how best to integrate the CMEP into PG&E's regionally-oriented operating structure.

- What, if any, training requirements are necessary to train the team PG&E will aim to
 hire experienced employees who will be able to step easily into these technical and
 customer support roles by virtue of their previous experience. However, as with any
 new role, some on the job training will be required. PG&E will aim to pair new
 personnel in the role with others in the company who are experienced in that function
 for an efficient and effective transfer of knowledge.
- Organizational structure of the team Please see the answer two bullets above.
- Operational plan of the team including, but not limited to:
 - How the team will intake and process applications;
 - How the team will engage local and tribal governments; and
 - Timeline for full implementation.

PG&E will have a web-based form to request resilience project support. The request, whether it comes through that form or a local PG&E representative, will be directed to the appropriate Resilience Specialist for that region. The Resilience Specialist will use software to intake and track the requests and will facilitate initial project vetting and subsequent support from a Solution Integrator or other personnel as needed. The full description of Enhanced Technical Support is provided in the CMEP Scope section of this document. The Enhanced Technical Support team will begin ramping up in late 2020 and continue into 2021.

V. <u>CMEP Scope</u>

As described in PG&E's Track 1 testimony,⁹ CMEP seeks to enable community-proposed microgrids that provide enhanced resilience for critical facilities and vulnerable customer groups. At its core, CMEP is comprised of four elements:

- 1) Web-based Tools and Information
- 2) Enhanced Technical Support
- 3) Community Microgrid Enablement Tariff
- 4) Cost Offsets for Distribution Upgrades

These four elements are described in further detail below.

⁹ Track 1 Proposal of PG&E Addressing Immediate Resiliency Strategies for Outages, Exh. PG&E-1 (Prepared Testimony), served in R.19-09-009 on January 21, 2020 ("PG&E Track 1 Testimony"), p. 5-2.

A. Web-Based Tools and Information

On July 17, 2020, PG&E filed Advice Letter 5881-E, "Implementation Plan for Resiliency Project Engagement Guide in Compliance with D.20-06-017". The Advice Letter describes PG&E's plans for a comprehensive guide to support communities in their development of microgrids and other resiliency projects. By making critical tools and resources publicly available and accessible in a central location, PG&E aims to facilitate streamlined access for community self-service and expedited development of resiliency solutions.

As a critical component of CMEP, PG&E's "Community Resilience Guide" will include:

- Comprehensive information on behind the-meter (BTM) and community microgrid implementations, including process, rate and incentive availability, key project design considerations, and other key pieces of information,
- Centralized technical resources, applicable PG&E standards, and guidance to help local and tribal governments navigate PG&E's service planning and interconnection processes, and;
- Tools to assist communities in assessing initial project viability and siting considerations, including relevant maps, studies, and reports pertaining to PG&E's transmission and distribution system.

The Community Resilience Guide is the cornerstone of the web-based tools and information made available under CMEP, though additional resources may be added over time as PG&E gains experience and understanding of what tools and information communities most need. The information will be applicable not only to multi-customer microgrids, but also to certain types of single-customer microgrid configurations and other resilience projects. PG&E expects to make the Guide publicly available in the last quarter of 2020.

B. Enhanced Technical Support

PG&E will dedicate staff to a new community resilience function focused on providing Enhanced Technical Support and project management for eligible CMEP projects. The technical support is structured in three stages, each with distinct objectives, and serves to facilitate the development of a project from initial concept exploration, through solution assessment, and finally, for certain types of resilience solutions, through project completion. The three stages are described below.

¹⁰ "Community Resilience Guide" is PG&E's customer-facing name for the Resiliency Project Engagement Guide directed by the CPUC.

- Stage 1: Vetting In this stage, one or more community representative(s) will typically come to PG&E seeking a resilience solution for their community.¹¹ PG&E will help the community understand the options available to them and share basic grid characteristics in the area that may impact the extent of likely upgrades needed under different scenarios. This exchange typically takes place through one or more conversations with Resilience Specialists and Resilience Solution Integrators, who will engage the community representative(s) in a discussion of their goals and needs, and specific characteristics of the desired project. PG&E support in this stage may include the following:
 - Overview of transmission and distribution system characteristics in the area
 - Hosting and deliverability capacity information
 - o Grid solution conceptualization
 - o Potential isolation points and circuit undergrounding opportunities
 - Information on PG&E's planned PSPS mitigation activities
 - Community Microgrid Enablement Tariff (CMET) pre-application study and consultation, if applicable

The objective of this stage is to help the community discern what resiliency approach may best meet the community's specific needs. This will direct the type of support provided in the next stage: Solution Assessment.

- Stage 2: Solution Assessment In this stage, PG&E will provide more specific technical guidance and support to the community and its technical/engineering partner(s) according to the type of resilience solution being sought. PG&E will require more detailed information about the critical facilities and their loads, as well as any service planning upgrades needed. PG&E support in this stage may include:
 - Training on grid data tools
 - Limited microgrid design support
 - o CMET application guidance, if applicable
 - Tariff and interconnection policy support
 - Microgrid Islanding Study ("MIS") and consultation, if applicable¹²

¹¹ PG&E will take a more proactive role in outreach to Disadvantaged and Vulnerable communities, and will prioritize technical support to those communities' eligible projects. A full discussion of PG&E's prioritization for Disadvantaged and Vulnerable communities can be found in the Prioritization section of this Advice Letter.

¹² The Microgrid Islanding Study is described in the CMET, attached as Appendix 4 to this Advice Letter. It is an engineering study conducted by the Distribution Provider to determine the required modifications to the Distribution Facilities, including the cost and scheduled completion date for such modifications.

The objective of this stage is to support the community and its technical/ engineering partner(s) in planning and designing a robust multi-customer resilience solution. Customers seeking single-customer resilience solutions will still be supported by PG&E; however, the CMEP program will not fund those functions, which exist today.

- Stage 3: Solution Execution In this stage, PG&E provides continuing support for eligible multi-customer microgrid solutions up to project commissioning. PG&E's Resilience Specialists will provide ongoing program management and coordination with all relevant PG&E processes. This may include:
 - Support with necessary agreements (Microgrid Operating Agreement ("MOA") and Special Facilities Agreement ("SFA")) to obtain eligible cost offsets for special facilities
 - Control and communication integration support

The objective of this stage is to ensure that the execution of the multi-customer microgrid is coordinated across all PG&E functions and that the community and its technical / engineering partner(s) have a single point of contact for support through the entirety of the process.

Figure 1 below summarizes how CMEP's Enhanced Technical Support facilitates some of the microgrid and interconnection application, study, and agreement processes involved in developing a multi-customer microgrid. Details of the processes will continue to be refined based on experience and will be provided on PG&E's CMEP website after program approval.

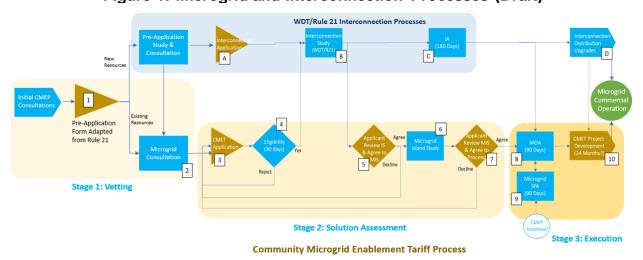


Figure 1: Microgrid and Interconnection Processes (Draft)

C. Community Microgrid Enablement Tariff

PG&E's Track 1 testimony in the Microgrid OIR noted that the tariff necessary to govern the operation of community microgrids does not currently exist, and described PG&E's intent to remove this barrier by submitting one or more tariffs for Commission review and approval with its implementation advice letter. Accordingly, PG&E is submitting as Appendix 4 to this Advice Letter an experimental tariff, the Community Microgrid Enablement Tariff (CMET), to govern the eligibility, engineering studies, development, and island and transitional operation of Community Microgrids, as defined in the Eligibility section of this advice letter.

The tariff is available on a first-come, first served basis to applicants who meet the eligibility requirements of the tariff and submit a complete CMET application. Meeting the requirements of the Community Microgrid Enablement Tariff, including completion of the Microgrid Islanding Study and execution of the Special Facilities Agreement, is a requirement for obtaining cost offsets under the CMEP.

D. Cost Offsets for Certain Distribution Upgrades

In D.20-06-017 the CPUC approved with modifications PG&E's CMEP, which included a capital expenditure budget of \$27 million in 2021 and 2022.¹⁴ The capital budgets are available for costs actually incurred to provide certain upgrades to PG&E's electric distribution system that are required in order to implement the islanding function of a community microgrid, or are deemed necessary by PG&E to ensure safe operations. To implement this provision, PG&E proposes to offset 100% of costs for PG&E owned- and operated equipment identified in the Microgrid Islanding Study, up to a cap of \$3 million per project. These are costs that otherwise would normally be the responsibility of the customer requesting the upgrades under relevant existing tariffs. Costs associated with generation and/or storage that power the microgrid would not be eligible for this component of the CMEP.

Examples of the types of equipment to be covered include:

- Equipment to enable a section of the grid to disconnect from the larger grid (e.g., isolation devices)
- Equipment to operate the microgrid (e.g., PG&E's microgrid controller)
- Equipment to ensure that the utility-owned distribution infrastructure making up the microgrid is safe to operate (e.g., fault protection devices and hardening)

¹³ PG&E Track 1 Testimony, supra, p. 5-4

¹⁴ *Id.*, p. 5-7.

In accordance with the Commission's direction to prioritize certain communities, PG&E further proposes to set aside one-third of the total authorized capital budget for the CMEP, or \$9 million per year, for communities meeting the definition of Disadvantaged and Vulnerable Communities, as defined in the Prioritization section of this document. Should the qualified reservations from these communities exceed \$9 million in 2021 or 2022, they may also access the non-reserved portion of the remaining funds.

Subject to the above carve-out of funds for Disadvantaged and Vulnerable Communities, cost offset funding will be made available on a first-come, first-served basis to those customers who meet the requirements of the Community Microgrid Enablement Tariff, including completion of the Microgrid Islanding Study and execution of the Special Facilities Agreement.

VI. CMEP Project Applicability, and Eligibility Criteria

The eligibility and applicability of different project types varies by CMEP program element.

It has been PG&E's experience that customer resilience-related requests often begin with an inquiry into microgrids. After one or more exploratory conversations and considering feasibility, cost, timing and other factors, it may be determined that the community's preferred solution is something other than a community microgrid (e.g., a behind-the-meter solution for a Critical Facility or a grid modification only solution). Where consistent with PG&E's approved proposal in D.20-06-017 and subject to resource constraints, PG&E will provide appropriate support to these alternative Critical Facility resilience projects with the goal of identifying and implementing the solution that best fits the community's objectives. However, the applicability of the various program elements, and the depth of technical support provided, will vary by the type of resilience solution that the community elects to pursue.

In particular, the Enhanced Technical Support element of the program will provide varying depths of support depending upon the type of resilience project under consideration. These levels of support are described in the Program Scope section and are broadly applicable as follows:

- Stage 1: Project Vetting Applicable to any type of community-driven resilience request
- Stage 2: Solution Assessment Applicable to any type of multi-customer resilience solution, whether that be, for example, a grid upgrade or a multicustomer microgrid.
- Stage 3: Solution Execution Applicable to multi-customer microgrid solutions.

¹⁵ If based upon projects in the pipeline PG&E does not reasonably anticipate that the \$9 million in reserved funds will be used by Disadvantaged and Vulnerable Communities, PG&E may choose to release those funds to projects that would not otherwise qualify for the reserved funds.

Table 1 below summarizes the applicability of CMEP program element by type of community resilience request.

Table 1: CMEP Program Element Applicability by Project Type

			Customer-Driven Resilience Requests		
CMEP Program Element Applicability			Single Customer	Multi-Customer	
by Project Type			Single customer resilience requests	Multi-customer non-MG solutions	Multi- customer MG solutions ¹⁶
Α	Enhanced Tools 8	& Information	X	X	Χ
В	Enhanced	Stage 1: Vetting	X	X	Χ
	Technical				
	Support	Stage 2:		X	X
		Solution			
		Assessment			
		Stage 3:			X
		Solution			
		Execution			
С	C Community Microgrid Enablement				Χ
	Tariff (CMET)				
D	Cost Offsets				X

The eligibility criteria for the various elements of CMEP are described below.

- **1. Tools and Information**: No eligibility restrictions. Available to the public.
- 2. Enhanced Technical Support
 - a. Vetting: Addresses the needs of a Critical Facility and budget identified
 - b. **Solution Assessment**: Vetting criteria plus the "Location", "Customers Served" and "Community Interest" criteria below
 - c. Solution Execution: See specific "Community Microgrid Eligibility" criteria below
- **3. Community Microgrid Enablement Tariff:** See specific "Community Microgrid Eligibility" criteria below, plus those provisions detailed in the CMET.
- **4. Cost Offsets:** See specific "Community Microgrid Eligibility" criteria below, plus those provisions detailed in the CMET.

Community Microgrid Eligibility Criteria

Solution Execution support, the Community Microgrid Enablement Tariff, and the cost offsets elements of CMEP are applicable to multi-customer microgrid solutions,

¹⁶ Referred to as "Community Microgrid" in the Community Microgrid Enablement Tariff (CMET)

alternatively referred to in this Advice Letter as "Community Microgrids", defined as follows:

- Location: The project must be located within PG&E's electric service territory, with Project Resources interconnected to PG&E's electric distribution system, and further at least one customer served by the microgrid must be located either in a Tier 2 or Tier 3 High Fire Threat District (HFTD) at the time of CMET application,¹⁷ in an area that has been impacted by a PSPS event in the past, or is in an area prone to outages.¹⁸
- Customers Served: The project must meet the needs of at least one Critical Facility, 19 and at least one additional customer within the electrical boundary of the microgrid.
- Community Microgrid Parameters: The project must include one or more energy producing resources ("Project Resources") that do not exceed 20 megawatts ("MW") in aggregate nameplate capacity within a clearly defined electrical boundary on PG&E's Distribution System; the project must act as a single, controllable entity; the project must be able to connect to, disconnect from, and run in parallel with larger portions of the electrical grid; and the project must be capable of maintaining electrical supply and service quality when isolated to connected customers during larger grid disturbances. Project Resources must be interconnected to PG&E's Distribution System pursuant to PG&E's WDT and/or Electric Rule 21 as applicable.
- Community Interest: The CMET Applicant must provide to PG&E a written letter from any local government, tribal government, or CCA, as applicable, with jurisdiction over or service within the proposed project electrical boundary to provide an expression of interest in the project.

The CMET contains additional provisions, including those regarding applicant experience and a pre-application report, which are required criteria for the tariff.

VII. Prioritization

Taking feedback from the stakeholder workshops, as well as specific directives in D.20-06-017, PG&E proposes to prioritize CMEP resources across two broad categories:

¹⁷ Once determined, this criterion will vest, such that the project will not be disqualified in the future if the boundaries change.

¹⁸ Defined for this purpose as the top 1% Worst Performing Circuits excluding Major Event Days as shown in PG&E's Annual <u>Electric Reliability Report</u>, in either the Average Interruption Duration Index ("AIDI") or Average Interruption Frequency Index ("AIFI") category, in either of the last two years. Projects located in areas that have been excluded from all reasonably anticipated potential future PSPS events due to other PSPS mitigation activities will not be eligible, regardless of whether they have previously experienced a PSPS event.

¹⁹ See Appendix 5: List of Critical Facilities and Critical Infrastructure.

- Projects that serve disadvantaged and vulnerable communities
- Projects that are most urgent for public health, safety, and public interest

The prioritization for each of these areas is described below.

A. Projects Serving Disadvantaged and Vulnerable Communities

PG&E proposes to prioritize projects that serve and keep energized DACs, customers with access and functional needs, medical baseline customers, and hard to reach customers located in remote areas. PG&E adopts for purposes of the CMEP the following criteria to identify these communities. PG&E will prioritize projects in which at least one customer served by the microgrid is located in an area that meets at least one of the following criteria:

- Disadvantaged Communities as defined by the CalEnviroScreen²⁰ (top 25% scoring census tracts, plus top 5% pollution burden communities without a full score because of unreliable socioeconomic data)
- Tribal Lands
- Zip codes with more than 50% of residents enrolled or eligible for the California Alternate Rates for Energy ("CARE") rate
- Zip codes identified as "Rural", per the Goldsmith Modification²¹

During the design stage of the program, PG&E consulted with several organizations representing the interests of disadvantaged and vulnerable communities in order to obtain input and feedback on how best to prioritize their needs. PG&E incorporated this feedback into the following specific strategies to support these communities:

Engage proactively with DAC and vulnerable communities – Knowing that lowincome and disadvantaged communities may not have the resources available
to prioritize exploration of resiliency solutions, PG&E will take a more proactive
stance to support these communities. PG&E will utilize its grid knowledge to
seek locations in DAC and vulnerable communities which may be favorable for
a community microgrid, and will engage with community leaders and CBOs
where appropriate to explore potential resiliency project development in those
communities.

²⁰ CalEnviroScreen is a screening tool used to identify California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. See https://oehha.ca.gov/calenviroscreen.

²¹ Rural areas are generally defined as those isolated from larger metropolitan areas, by distance or other physical features. The Goldsmith Modification was created to recognize small towns and rural areas found in large metropolitan counties. https://www.ruralhealthinfo.org/topics/what-is-rural#goldsmith-modification

- Ensure community representation PG&E heard in its feedback sessions a
 clear call to engage not only with elected community leaders and public safety
 leaders, but also with CBOs. PG&E will seek to ensure that there is appropriate
 community-based representation in the planning stage for any resiliency
 projects in disadvantaged or vulnerable communities.
- Prioritize access to Enhanced Technical Support for DACs and vulnerable communities – PG&E anticipates that many communities may seek technical support in exploring resiliency solutions. To the extent that resources are limited, PG&E will prioritize requests from disadvantaged and vulnerable communities for technical support under the program.
- Create separate funding bucket cost category for DACs and vulnerable communities As described in the Program Scope Cost Offsets portion of this Advice Letter, PG&E will set aside a separate bucket of funding from the \$27 million in authorized capital expenditure for disadvantaged and vulnerable communities, as defined for purposes of CMEP in the Prioritization section of this document. Specifically, PG&E will set aside \$9 million in 2021 and 2022, in order to ensure priority access for these communities. This funding is available for costs incurred to provide certain upgrades to PG&E's electric distribution system that are required in order to implement the islanding function of a community microgrid or are deemed necessary by PG&E to ensure safe operations. Should the reservations from these communities exceed \$9 million in 2021 or 2022, DAC and vulnerable communities may also access the non-reserved portion of the remaining funds on a first-come, first-served basis along with other communities.

B. Projects That Are Most Urgent for Public Health, Safety, and Public Interest

Additionally, PG&E wishes to prioritize those projects which are most urgent for public health, safety, and public interest. As part of this, CMEP will prioritize projects that rely on higher levels of renewable energy. This prioritization will be made through an assessment of the urgency of the risks facing the community, the timeliness / executability of the solution, and the potential impact to communities. While not an exact science, PG&E will prioritize Enhanced Technical Support for projects based on the following criteria:

- Previously impacted by PSPS or significant outage events
- Future potential for PSPS / outages
 - Higher risk fire threat areas
 - Historical weather data analysis

- Number of critical facilities served²²
- Benefitting scope of the critical facilities
- Benefit to disadvantaged and vulnerable customers
- Higher levels of renewable energy
- Grid feasibility and level of effort given grid features in the area

VIII. PG&E Proposes a Phased Approach to Incorporate Lessons Learned

The microgrid market in California and around the U.S. is nascent and rapidly evolving. In the Microgrid OIR, the Commission on July 23, 2020, issued a Track 2 Staff Proposal titled "Facilitating the Commercialization of Microgrids Pursuant to Senate Bill 1339". Opening comments were filed on that Staff Proposal on August 14, 2020.

The issues addressed in Tracks 2 and 3 of the Microgrid OIR will shape the regulatory, technical, and policy landscape for community microgrids in California. The specific needs and concerns as expressed by communities today, which this CMEP aims to address, will certainly change over time with this changing landscape. As with any new program, and particularly for a program serving a nascent and rapidly evolving market, the approved structure should allow for flexibility to adapt as experience is gained with the program.

As such, PG&E requests that the Commission adopt a phased approach for PG&E's rollout of CMEP. The program design described in this filing would be viewed as "Phase 1" of this program. As directed in D.20-06-017, PG&E will provide a program evaluation as part of its 2023 General Rate Case ("GRC") request. Either in that context, or sooner as necessary,²³ when further lessons are learned from the CMEP rollout, PG&E will propose one or more subsequent phases of the Program. In this way, policymakers, stakeholders, and the CPUC will have an opportunity to refine and improve the program, with the benefit of additional experience and an updated policy landscape, to more fully realize its objectives.

IX. Request for Findings

For the reasons set forth above and in the Attachments to this Advice Letter, PG&E requests that any disposition of this Advice Letter making it effective without modification will be deemed to include the following findings and conclusions:

 PG&E's Advice Letter fulfills the requirements set forth in Ordering Paragraph 17 of D.20-06-017, as further detailed in Sections 5.1.2 and 4.3.4.1 of that Decision;

²² See Appendix 5 for list of critical facilities.

²³ PG&E requests authorization to submit another Tier 2 advice letter to propose any necessary modifications to the CMEP design criteria made effective through this Advice Letter, if those modifications are necessary prior to adoption of a decision in PG&E's 2023 GRC.

- PG&E's pro forma Community Microgrid Enablement Tariff, as set forth in Appendix 4 to this Advice Letter, is approved for use on an experimental basis as part of the CMEP. PG&E is authorized to submit a Tier 1 advice letter within 30 days of disposition of this Advice Letter to file the CMET in final tariff form;
- PG&E may seek modifications to the CMEP, including the Community Microgrid Enablement Tariff, prior to filing its program evaluation as part of its 2023 General Rate Case Application through a subsequent Tier 2 Advice Letter on its own motion or in response to direction from the CPUC;
- The program scope, project applicability, and eligibility criteria for the CMEP set forth in this Advice Letter are reasonable; and
- The prioritization criteria for the CMEP set forth in this Advice Letter, including the proposal to set aside a portion of capital funding for Disadvantaged and Vulnerable Communities as defined herein, are reasonable and consistent with D.20-06-017.

X. List of Appendices

The following appendices are included with this Advice Letter:

Appendix 1: Local and Tribal Government and CCA Workshops Summary

Appendix 2: Workshop Agendas, Attendee Lists, and Meeting Minutes

Appendix 3: Meetings on Prioritization of DAC and Vulnerable Communities

Appendix 4: Pro Forma Community Microgrid Enablement Tariff

Appendix 5: Critical Facilities Definition

Appendix 6: Answers to Questions on p.86 of D.20-06-017

Protests

Due to the COVID-19 pandemic and the shelter at home orders, PG&E is currently unable to receive protests or comments to this advice letter via U.S. mail or fax. Please submit protests or comments to this advice letter to EDTariffUnit@cpuc.ca.gov and PGETariffs@pge.com

Any party wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than September 7, 2020, which is 21 days²⁴ after the date of this submittal. Protests must be submitted to:

CPUC Energy Division ED Tariff Unit 505 Van Ness Avenue, 4th Floor San Francisco, California 94102

Facsimile: (415) 703-2200

E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Erik Jacobson Director, Regulatory Relations c/o Megan Lawson Pacific Gas and Electric Company 77 Beale Street, Mail Code B13U P.O. Box 770000 San Francisco, California 94177

Facsimile: (415) 973-3582 E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was

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²⁴ The 20-day protest period condudes on a weekend, therefore, PG&E is moving this date to the following business day.

sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

XI. Effective Date

Pursuant to General Order (GO) 96-B, Rule 5.2, and OP 17 of D. 20-06-017, this advice letter is submitted with a Tier 2 designation. PG&E requests that this Tier 2 advice submittal become effective on regular notice, September 16, 2020, which is 30 calendar days after the date of submittal.

XII. Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list R.19-09-009. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: http://www.pge.com/tariffs/.

/S/

Erik Jacobson

Director, Regulatory Relations

CC:

Service List R.19-09-009

Attachments





California Public Utilities Commission

ADVICE LETTER



ENERGIUILIII	OF CALL	
MUST BE COMPLETED BY UTI	ILITY (Attach additional pages as needed)	
Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39E)		
Utility type: LC GAS WATER PLC HEAT	Contact Person: Kimberly Loo Phone #: (415)973-4587 E-mail: PGETariffs@pge.com E-mail Disposition Notice to: KELM@pge.com	
EXPLANATION OF UTILITY TYPE ELC = Electric GAS = Gas WATER = Water PLC = Pipeline HEAT = Heat WATER = Water	(Date Submitted / Received Stamp by CPUC)	
Advice Letter (AL) #: 5918-E	Tier Designation: 2	
Keywords (choose from CPUC listing): Complian		
AL Type: Monthly Quarterly Annua	_	
If AL submitted in compliance with a Commissi D.20-06-017	on order, indicate relevant Decision/Resolution #:	
Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: $_{ m No}$		
Summarize differences between the AL and the prior withdrawn or rejected AL:		
Confidential treatment requested? Yes No If yes, specification of confidential information: Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/access to confidential information: Resolution required? Yes No		
Requested effective date: $9/16/20$	No. of tariff sheets: $_{ m 0}$	
Estimated system annual revenue effect (%): N	J/A	
Estimated system average rate effect (%): $\mathrm{N/A}$		
When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).		
Tariff schedules affected: $_{ m N/A}$		
Service affected and changes proposed $^{\!\scriptscriptstyle 1:}$ $_{\!\scriptscriptstyle N/A}$	1	
Pending advice letters that revise the same tar	iff sheets: $_{ m N/A}$	

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division Attention: Tariff Unit 505 Van Ness Avenue San Francisco, CA 94102

Email: EDTariffUnit@cpuc.ca.gov

Name: Erik Jacobson, c/o Megan Lawson

Title: Director, Regulatory Relations

Utility Name: Pacific Gas and Electric Company Address: 77 Beale Street, Mail Code B13U

City: San Francisco, CA 94177

State: California Zip: 94177

Telephone (xxx) xxx-xxxx: (415)973-2093 Facsimile (xxx) xxx-xxxx: (415)973-3582

Email: PGETariffs@pge.com

Name:

Title:

Utility Name:

Address:

City:

State: District of Columbia

Zip:

Telephone (xxx) xxx-xxxx: Facsimile (xxx) xxx-xxxx:

Email:

Appendix 1

Local and Tribal Government and CCA Workshops Summary

	Area	Feedback	Program Design Implication	Reason
1	Program Eligibility	With the future in mind, session participants are largely in favor of minimum percentage renewable energy requirements	PG&E will prioritize projects with higher levels of renewable energy.	CMEP is a pathway for community-driven projects, and we anticipate that most communities in our service territory will seek renewables to power their local resilience solutions. However, practical resilience engineering and cost considerations present trade-offs, and PG&E will leave it to the community which is driving the solution to determine how best to reconcile those trade-offs for their particular community's needs.
2		While fire season priorities may be top of the list, most feel there are a number of other resiliency concerns worthy of the program.	We will not impose any near-term fire- season eligibility criteria, however during the intake and assessment process, priority will be given to projects that can feasibly be on- line for the near-term fires season.	Most of the microgrid projects seeking technical support and cost offsets will require more planning and engineering than can be completed by the 2020 fire season. However, the CMEP intake process may be able to assist some projects in answering questions and completing requirements in time for the 2020 fire season.
3	Enhanced Technical Support	Session participants stress the value of having a point-person (vs. a process) to educate and guide, while also being sensitive to the nuanced needs of each customer.	PG&E will provide a team of Resilience Specialists and Solution Integrators to educate and guide customers through the process of developing a resilience solution.	PG&E has clearly heard the desire from communities for a single point of contact to facilitate the PG&E processes and requirements. CMEP's Enhanced Technical Support is designed to provide this support.
4		Customers recognize the scale and complexity of these projects and will look to PG&E to help	PG&E's team of Resilience Specialists and Solution Integrators will be trained to work interactively with communities and their technical / engineering partner(s) in	Although many of the grid capacity and interconnection reports are currently available and will be further centralized for ease of access through PG&E's Customer

		them evaluate and optimize for opportunity, feasibility, and costs.	assessing the tradeoffs inherent in any solution design.	Resiliency Guide, PG&E's Resilience Specialists and Solution Integrators can play an important role in guiding customers through these tools and assisting with interpretation of the information.
5	Application Process	Customers are unsure of the best way to design application criteria in a way that is both equitable and efficient, though most gravitate to some version of Keep Things Simple or Minimal Financial Threshold and Some Project Framing.	 Web-based Tools & Information – no application process Enhanced Technical Support – budget identified CMET and Cost Offsets – only those requirements necessary to ensure safe and qualified applications 	We will keep the process as streamlined and simple as possible, while ensuring that qualified applicants are not held up by others seeking simply to "hold their place in the queue".
6		While customers see pros and cons to each approach, a majority side toward annual or twice-yearly applications.	We take the larger point that we heard in this section regarding simplifying access to the program and the funding. While maintaining the minimum requirements to ensure that qualified, serious applicants are not held up by others seeking simply to "hold their place in the queue", we will not apply an additional waiting period on applicants.	We heard in this section a concern over better-organized or wealthier communities monopolizing the funding. As the process for applying for funding comes into sharper focus, it becomes clear that it will be quite far in the process after technical feasibility studies, system impact study, and related agreements have been signed. PG&E proposes to aid and prioritize disadvantaged and vulnerable communities through this process. Putting an additional waiting period on all applicants after these studies and agreements have been completed is contrary to the feedback we received of simplifying access to the program and the funding.
7	Cost Offset	Participants are split on	We will apply a 100% cost offset to the	Within the constraints of the costs covered
<u> </u>	Design	how to design cost	covered costs (those special facilities	under the program (meaning that all the

		offsets; proving the concept has the best guarantee of some early successes, but feels prone to inequities.	necessary for the islanding and safe operation of the MG).	costs of a microgrid are not covered), we wish to provide projects with the best chance of coming to fruition. It is better to err on the side of funding a few pilots that can provide significant learnings, than providing a less meaningful amount of funding to potentially more projects.
8		Other ideas include a staggered approach to funding and a 100% cost offset to communities who need it.	See above.	As with other criteria, we will re-evaluate as the program gains experience to ensure that providing 100% offset of covered cost categories does not preclude a significant number of projects from being funded.
9	Project Prioritization	Prioritization goals center around public interest, risk levels, and viability of proposed projects.	We will prioritize projects that serve disadvantaged and vulnerable communities, and projects that are most urgent for public health, safety, and public interest	We agree with the prioritization goals of public interest, risk levels, and viability of proposed projects.
10		Other ideas for prioritization center around the key stakeholder/community engagement, the transferability of lessons learned, and a critical look at vulnerable communities.	 Community engagement is a required criterion for the program. We will share program lessons learned through the program evaluation. We will prioritize disadvantaged vulnerable communities. 	We agree with the prioritization goals of public interest, risk levels, and viability of proposed projects.
11	Key Barriers and Boosters	Today, participants don't have the capacity, resources or information needed to get started on such a complex	The program's tools, information, and Enhanced Technical Support are intended to provide exactly this type of support. The specifics of the program design will likely	N/A

	initiative; PG&E would need to provide this additional support.	evolve over time as we gain experience with the program.	
12	PG&E can be helpful by providing up-front technical and scoping support and providing relevant data/scoping.	(Same comment as above)	N/A

Community Microgrid Enablement Program

Stakeholder Outreach Workshop

Final Report

July 2020





Contents

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Objectives & Methodology

Objectives:

 Capture community feedback on the design of program eligibility, enhanced technical support, application process, cost offset, and project prioritization for the Community Microgrid Enablement Program (CMEP) to determine how PG&E can design the program to best meet community resiliency needs and removing barriers to microgrid deployment.

Methodology:

- 5 community workshop sessions conducted with community and tribal government leaders, vendors/contractors, and decision-makers
- Utilization of "polling" within sessions to identify community sentiments and facilitate discussion
- Follow-up feedback email on key barriers to microgrid development and the most helpful areas for PG&E support



Workshop Attendees by Session

Session 1

Alyssa Carroll
Anne Kloose
Annie Secrest
Ashley Paulsworth
Brent Slama
Chris Read
Daniel Tutt
Dore Bietz
Kevin Thompson
Linnea Jackson
Liz Peterson
Miguel Barcenas
Rene Mendoza
Tony Pastore
Roy Hapeman

Session 2

Adrienne Etherton Alberto Colombo Cara Koepf Catrina Christian Dave Fribush Edie Schaffer Hoi-Fei Mok Jeremy Dennis Jonathan Abendschein Kim Springer Leslie Brown Louis Sun Marcos Santiago Nicole Scott Sarah Kolarik Zoe Elizabeth

Session 3

Aaron Laurel Alexia Retallack Brian Guth Chuck Heisleman **Dave Carter** Gordon Samuel Grant Hunsicker Jim Zoellick John Smith Katie Van Dyke Kevin Perkins Mahayla Slackerelli Paul Cummings Peter Lehman Rebecca Boyles Tim Kiser

Session 4

Alan Flora Brittani Gallagher Carol Huchingson Cristine Condon Cindy Cortez Cory Bytof Danielle Baker Darcie Antle Diane Ramirez **Edwin Smith** Jana Ganion Jason Nutt Patrick Carter Rachel DiFranco Tasha Wright Trevor Hunter

Session 5

Abbie Laugtug AJ Falcone Allie Dietro **Brady Borderching** Dara Salour Gerry Vurciaga Heather Curlee Jin Noh Jim Barbour Jonathan Kevles Joyce Steingass Les Guiliasi Michael Puckett Nikole Rajnovich Patsy Dugger Sascha Von Meier Thomas McAndrew Venkat Venkataraman Val Decker



Agenda & Meeting Objectives

	Agenda Item	Duration (Min)
1	Safety and Introductions	10
2	Today's Agenda and Objectives	5
3	About CMEP & Where We Need Your Help	15
4	Framework & Ground Rules for Workshop	5
5	Program Eligibility	15
6	Enhanced Technical Support	15
8	Application Process	15
9	Cost Offset Design	15
10	Project Prioritization	15
11	Open Feedback	5
12	Wrap Up & Next Steps	5

Meeting Objectives:

- 1. Gather communities' thoughts and suggestions regarding the CMEP to help guide final program design.
- Ensure communities know how to provide additional feedback to PG&E after today's discussion.

Meeting Ground Rules:

- 1. Please keep your line on "mute" unless speaking.
- 2. When possible, please use the chat feature for clarification questions.
- 3. Please keep comments focused on the agenda topic being discussed.
- 4. When speaking, please state your name and organization first.
- 5. Please don't let your ideas or opinions go unheard!

Executive Summary





Executive Summary (Program Eligibility)

Program Eligibility

With the future in mind, session participants are largely in favor of minimum percentage renewable energy requirements.

- As the state is already moving in the direction of renewable energy with carbon-related policy considerations, it feels counterproductive to lean on non-renewables that aren't consistent with overall goals and priorities.
- There's a growing concern that investing in infrastructure that depends on fossil fuels as the state moves in the other direction, will necessitate the decommissioning of infrastructure in a few years.

While fire season priorities may be top of the list, most feel there are a number of other resiliency concerns worthy of the program.

 A certain degree of prioritization should go to communities at the highest risk of PSPS events. However, there are a variety of reasons for power loss, which aren't always related to PSPS events. Grid resiliency issues in remote communities that don't necessarily overlap with the fire footprint should also be weighed heavily as PG&E considers how to meet broader community needs. "We're in a region that has completely embraced sustainable energy needs. So I would turn that question around – I'm not sure why we wouldn't go down that route."

"I wouldn't say they should be limited, but definitely prioritized. There are other facilities that people will need to fall back from in the case of fire that aren't necessarily in the fire zone."

"If the main goal is to get us up and running and remove barriers, keep it as simple as possible."



Executive Summary (Enhanced Technical Support)

Enhanced Technical Support

Session participants stress the value of having a pointperson (vs. a process) to educate and guide, while also being sensitive to the nuanced needs of each customer.

- Communities don't want to be micromanaged, but need help getting through PG&E processes and requirements. Customer's stress that it would be valuable to have a single point person across the duration of the project to ensure communities can move through the PG&E processes as efficiently as possible.
- PG&E should be sensitive to the fact that different communities will have different levels of expertise in certain areas – some will want to employ their own resources where others will need assistance.

Customers recognize the scale and complexity of these projects and will look to PG&E to help them evaluate and optimize for opportunity, feasibility, and costs.

• If microgrids are designed within the PG&E infrastructure, customers would need help from PG&E to understand feasibility of the microgrid, and they are more open to help with utility and interconnection information.

"I would like to underscore having one-point person from the start of the project through the completion of the project... I think a lot of the stalls that we experience with the solar projects could be expedited if there was one person that was there at the start."

"I think to the extent that you can provide us more information, we can do a lot of the project evaluation and technical support. It's more about the utility information we would need and working together collaboratively on the interconnection."



Executive Summary (Application Process)

Application Process

Customers are unsure of the best way to design application criteria in a way that is both equitable and efficient, though most gravitate to some version of Keep Things Simple or Minimal Financial Threshold and Some Project Framing.

- 'Keep things simple' appeals to those concerned about the exclusion of communities with fewer resources, but risks a flood of half-baked applications.
- Financial thresholds and project framing ensure serious and prepared applicants, but may exclude communities without funding or technical resources available.
- Minimal design concept encourages applicants to "level set" on their plan, but may require coordination with PG&E and risks excluding disadvantaged communities.

While customers see pros and cons to each approach, a majority side toward annual or twice-yearly applications.

- Annual or twice-yearly applications give applicants the time to gather resources and get their communities on board, but risk slowing down prepared projects.
- First come, first serve offers learning opportunities for future projects by giving priority to prepared communities, but raises equity concerns.
- Allocating resources across counties feels more equitable, but raises questions related to population and access.

"I do have concerns around community equity. Having an \$1000 deposit and some preliminary design work is a low threshold, but it could be prohibiting for communities that may really need these assets or resources the most."

"Certain regions will have a better response, a better ability to get things going quicker – having a deadline is important to make it more equitable."



Executive Summary (Cost Offset Design)

Cost Offset Design

Participants are split on how to design cost offsets; proving the concept has the best guarantee of some early successes, but feels prone to inequities.

- If PG&E isn't offsetting a large amount of the cost, those who need it the most may not be able to get enough offset to commit to the project.
- Proving this Works would provide a "roadmap" for future projects to get done more efficiently and effectively.
- However, "Let's prove this works" doesn't feel equitable, because it would mean huge amounts of funding to the first few applicants and less for those who need time to get resources together.

Other ideas include a staggered approach to funding and a 100% cost offset to communities who need it.

"I think if the program gets overwhelmed and you get a lot of projects in the door but none make it over the finish line, that would diminish the overall benefit to communities."

"You could fund as much as possible with the intent that it's a demonstration and educational project and that there's a collective agreement to learning and rolling forward future funding years more efficiently and effectively."

"Maybe some kind of sliding scale, depending on the size of the project and the square footage of critical facilities being addressed."



Executive Summary (Project Prioritization)

Project Prioritization

Prioritization goals center around public interest, risk levels, and viability of proposed projects.

Top Prioritization Criteria:

- Grid executability
- Public safety leader support
- Community-utilized resources
- Benefit provided to disadvantaged communities
- Clear planning/design work done
- Most urgent for public health/safety/interest

Other ideas for prioritization center around the key stakeholder/community engagement, the transferability of investments, and a critical look at vulnerable communities.

Other suggested criteria:

- Key stakeholder and community engagement
- Prioritize the educational component of investments to guide future projects
- · Create criteria to score based on vulnerability and risk of PSPS events
- Ensure population prioritization doesn't restrict those in need

"The likelihood of successful completion of a project is important because we're talking about where to put the resources – there might be some communities that think it's a great idea but there's a low likelihood of it actually happening."

"I think more broadly it's key stakeholder engagement and support. I think that if you only have one entity going after the application without already having engaged other stakeholders, the project is much more likely to struggle through the implementation process."



Executive Summary (Key Barriers & Boosters)

Key Barriers & Boosters

Today, participants don't have the capacity, resources or information needed to get started on such a complex initiative; PG&E would need to provide this additional support.

Key Barriers:

- Ability of a single entity to manage the full process
- Lack of capacity to identify and build out projects
- · Lack of context/information on the project
- Need for regulatory/logistical clarity from PG&E
- Need for more direct access to information and PG&E technical staff

PG&E can be helpful by providing up-front technical and scoping support and providing relevant data/scoping.

Key Boosters:

- Context on unexpected costs incurred in the deployment process (e.g. upgrades to infrastructure, interconnection studies)
- Up-front technical assistance from PG&E
- · Scoping on potential locations for the microgrid to ensure success
- Enable high-visibility learning opportunities for interested communities
- Make staffers available to CCAs/local governments for consultation
- Make data available to enable planning

"I have seen very few entities with sufficient capacity/understanding of this type of deployment to be able to orchestrate them. They will require orchestration with multiple layers of stakeholders, engineers, finance entities, regulators, etc."

"Scoping of potential microgrid locations. One example is to synthesize the considerable work PG&E is performing, engineering, and planning (2-5 year plan) so that we are all certain effort and funding is wisely invested and appropriately ranked in terms of priority."

Detailed Findings





Program Eligibility (Background & Questions)

Background

Base Eligibility Criteria (For all of program tools & support components, along with offset costs)

- Microgrid must use PG&E's grid to serve more than one customer.
- Must serve at least one critical facility.
- Must be in an area prone to outages.
- Project must have its own confirmed budget and funding.

Starter Questions

Should there be a requirement for a minimum percentage of renewable energy?

Should projects be limited to those needed to address near-term fire season priorities?

YES / NO / NOT SURE



Program Eligibility (Session Feedback)

With the future in mind, session participants are largely in favor of minimum percentage renewable energy requirements

YES

As the state is already moving in the direction of renewable energy with carbon-related policy considerations, it feels counterproductive to lean on non-renewables that aren't consistent with overall goals and priorities.

- There's a growing concern that investing in infrastructure that depends on fossil fuels as
 the state moves in the other direction, will necessitate the decommissioning of
 infrastructure in a few years.
- · Diesel/gas is less reliable in more rural areas.
- · Reducing pollution can improve quality of life in impacted communities.

"We're in a region that has completely embraced sustainable energy needs. So I would turn that question around – I'm not sure why we wouldn't go down that route." -- Session 2

"If one of the goals is to increase reliability, we've made the determination that especially in rural and remote areas we can't rely on the availability of natural gas or diesel in emergencies. Those natural gas pipelines might have been ruptured and the diesel fuel may be needed elsewhere."

-- Session 4

"In a community it would be good to have resiliency, but also try to achieve the most in terms of clean energy and improvement in pollution. These factors can improve quality of life, so having renewable will probably achieve not only resilience but sustainability." – Session 1

NO

- Requirements could heighten costs, thus making it less accessible to communities who need it.
- With a need to act now, the time taken to achieve the minimum percentage could be too long.
- Communities should be able to determine how to prioritize renewable energy among the multiple benefits that the grid will provide.
- Diverse fuel and generator types must be balanced with near-term cost, with the program acknowledging different tech options through different incentives.

"If the main goal is to get us up and running and remove barriers, keep it as simple as possible." - Session 3

"Some communities are trying to provide different benefits. Renewable energy does help, but having a little flexibility built in because other benefits will be quantified in different ways." – Session 3

"Diverse fuel source(s) and generator type(s) are important. However, near-term cost is also an issue. This is always a balance in microgrid design. Perhaps the program can acknowledge different tech "options" through varied incentives and other support allocated to each type of technology deployed." – Session 1

Should there be a requirement for a minimum percentage of renewable energy?

YES NO NOT SURE



Program Eligibility (Session Feedback)

technology deployed." - Session 1

While fire season priorities may be top of the list, most feel there are a number of other resiliency concerns worthy of the program

YES (but prioritized vs. limited to) NO • There are a variety of reasons for power loss, which aren't always related to PSPS events. A certain degree of prioritization should go to communities at the highest risk of PSPS events. Grid resiliency issues in remote communities that don't necessarily overlap with the fire footprint should also be weighed heavily as PG&E considers how to meet broader community needs. Near-term fire season priorities must be given extra "points" in the process to • Prioritizing PSPS events could limit other sites that are at risk of power shutoff. address the risk in these communities. PG&E should be considering and prioritizing larger goals of community resiliency and distributed energy resources. "I wouldn't say they should be limited, but definitely prioritized. There are other facilities that "If the main goal is to get us up and running and remove barriers, keep it as simple as possible." – Session 3 people will need to fall back from in the case of fire that aren't necessarily in the fire zone." -"Some communities are trying to provide different benefits. Renewable energy does help, but having a little flexibility built in because other Session 2 benefits will be quantified in different ways." - Session 3 "I think maybe a prioritization rather than a firm "Diverse fuel source(s) and generator type(s) are important. However, near-term cost is also an issue. This is always a balance in microgrid requirement makes sense." - Session 4 design. Perhaps the program can acknowledge different tech "options" through varied incentives and other support allocated to each type of

Should projects be limited to those needed to address near-term fire season priorities?

YES NO NOT SURE



Program Eligibility (Session Builds)

Other ideas center around a phased or partial incorporation of renewable energy and the weighing of risk factors beyond PSPS events

Start with partial diesel and phase out

"That might be an instance where

diesel generators could be initially

incorporated into the microgrid, but

with a plan to move those out of

the microgrid and replace them

with renewables and storage as you go along." – Session 4

"Maybe solar could be added in the future once we figure out how to handle the extra production in the middle of the day." – Session 4

Gradually add in solar

A combination of diesel and solar for a more diversified solution

"Maybe a combination of diesel and battery, so we achieve those emissions that the grid is already achieving." – Session 2

Weigh risk factors beyond PSPS events

"It's okay to give projects that serve that additional purpose points or something like that in the review process, but I wouldn't want to shut it off to other projects." – Session 1

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Program Eligibility (Vendor/Contractor Callouts)

Vendors/contractors are more receptive to near-term fire season prioritization and stress the importance of community resiliency and access

Communities with significant fire season risk must be prioritized

"The focus should indeed be on those projects that currently show the highest fire season/PSPS risk." - Session 5

Fire season prioritization is in line with state policies

"We would recommend yes [focus on near-term fire season priorities] as it makes sense from a statewide policy standpoint and PSPS shortfalls." – Session 5

Prioritize community access over minimum percentage renewable energy

"You're on a very compressed timeframe to put together a program and a lot of debate could go into what is the right minimum percentage? What if someone is below the line? Is there an exception that could take some time to sort out?" – Session 5

Resiliency goals should be driven by communities and SB 1339 requirements

"This is a community program that communities are going to dictate. For what's acceptable in communities, I would point to the SB 1339 statute for microgrids as the standard." – Session 5



Enhanced Tech Support (Background & Questions)

Background

The CPUC approved a framework to manage pre-application consulting services and intake of qualifying local and tribal government resiliency projects

- What services in particular are you looking for this staff to perform?
- What services are "essential" versus "nice to have"?

Starter Questions

Must-have / Nice-to-have / Not sure?

- Establishing an end-to-end project management process fo community-driven resilience projects
- PG&E dedicates a portion of the resources to do proactive outreach to prioritized communities
- Helping local and tribal governments understand resilience options
- Analyzing future PSPS exposure & identifying potential inflight or planned PSPS mitigations
- If a microgrid, identifying key project design considerations
- Determine to what extent the project may qualify for CMEP cost offsets
- PG&E provides a tool for local government/CCA engineers and consultants to design their own microgrids
- PG&E provides information on where a microgrid would be less costly (e.g. existing storage/gen resources + minimal grid upgrades and more available capacity)



Enhanced Tech Support (Session Feedback)

Session participants stress the value of having a point-person (vs. a process) to educate and guide, while also being sensitive to the nuanced needs of each customer

A. Establishing an end-to-end project management process for community-driven resilience projects

- Valuable to have a single point person across the duration of the project.
- Could use someone to ensure communities can move through the PG&E processes as efficiently as possible.
- Communities don't want to be micromanaged, but need help getting through PG&E processes and requirements.
- PG&E should be sensitive to the fact that different communities will have different levels of expertise in certain areas – some will want to employ their own resources where others will need assistance.

"I would like to underscore having one-point person from the start of the project through the completion of the project... I think a lot of the stalls that we experience with the solar projects could be expedited if there was one person that was there at the start." -- Session 1

"I thought it was a must-have. I was thinking about our town where we're very small. So having that kind of support, it's just absolutely necessary."

-- Session 2

B. PG&E dedicates a portion of the resources to do proactive outreach to prioritized communities

- Important because communities may not know they are high risk.
- Highest risk communities likely have least capacity to investigate program opportunities.
- Others feel that entities that are attentive and proactive should be rewarded for their efforts.

"I think those of us that are here are attentive to the issue and think it's a priority....

It would be nice to get those resources over those who haven't made it a priority

yet. But I realize how selfish that sounds." -- Session 4

"I think the community should drive the process because they know the territory, they know their facilities, and they can propose or drive the process." – Session 2

Project Management Resources for PG&E Specific Tasks (Must-Have votes among voters across all sessions)

Establishing an end-to-end project management process for community-driven resiliency projects

PG&E dedicates a portion of the resources to do proactive outreach to prioritized communities

Α



Enhanced Tech Support (Session Feedback)

Customers recognize the scale and complexity of these projects and will look to PG&E to help them evaluate and optimize for opportunity, feasibility, and costs

A. Helping local and tribal governments understand resilience options

- Local and tribal governments are critical to educating people about microgrids and there's a benefit to including them in the process
- Considered more of a nice to have by vendors/contractors as many feel they are already doing this.

"In terms of helping tribal governments understand resilience, I think that's our role. We already do that. The biggest thing for us is support with the information that we need so we can build these projects and get cooperation on the interconnection side of the house." – Session 5

B. Analyzing future PSPS exposure & identifying potential in-flight or planned PSPS mitigations

- Because PSPS exposure is an annual event, this could help prioritize what areas and projects they focus on and put investment toward over others
- This would help mitigate PSPS event impact on the community and plan ahead

"PSPS is theoretically an annual event and we need to make sure we don't overreact and put out tons of money on projects that may not be included. There may be places where a year or two down the road, there isn't going to be a lot of likelihood of an outage." – Session 2 C. If a microgrid, identifying key project design considerations.

 If microgrids are designed within the PG&E infrastructure, customers would need help from PG&E to understand feasibility of the microgrid, and they are more open to help with utility and interconnection information

"I think to the extent that you can provide us more information, we can do a lot of the project evaluation and technical support. It's more about the utility information we would need and working together collaboratively on the interconnection." — Session 1

D. Determine to what extent the project may qualify for CMEP cost offsets

- This would help entities understand what independent costs are and determine feasibility
- This would be a critical resource from PG&E since project managers would not be able to determine this otherwise

"If you're planning a project and trying to finance a project, you need to know the cost and you need to know how you're going to finance it. Some of these costs that we're talking about are ineligible for potential incentives. It would be important to know whether or not you're eligible to know if you have a viable project or how you need to adjust things on your end to hand the cost yourselves that you wouldn't otherwise have incentives for." – Session 3

Project Evaluation & Technical Support (Must-Have votes among voters across all sessions)

Helping local and tribal governments
understand resilience options

Analyzing future PSPS exposure & identifying potential in-flight or planned PSPS mitigations

If a microgrid, identifying key project design considerations

С

Determine to what extent the project may qualify for CMEP cost offsets

D

1	-1



Enhanced Tech Support (Session Feedback)

A design tool could be hit or miss, depending on ease of use and performance; customers look to PG&E to help with matchmaking between interested community players

A. PG&E provides a tool for local government/CCA engineers and consultants to design their own microgrids

- A high-level tool is appealing; a labor-intensive tool would more difficult to implement given competing demands on staff time
- A tool like this could help less technically savvy entities to process the project and compare it to what they're hearing from private sector counterparts
- There is potential for this tool to save money by providing information on interconnections from the start so they don't discover issues later down the line
- Ideally, the tool would provide answers to questions about the application process, threshold for applying, and help entities understand feasibility before getting financially involved and pursuing the project
- Other companies can offer this tool and some areas already have a tool like this (e.g. for high level of technical expertise that comes from the private side) so this may be considered more of a nice-to-have

"A tool like this would be useful to customize our own microgrids, but it seems like something that would take a lot of work." – Session 4

"I really think a tool that would help us identify the interconnection roots and where we might run into problems. These are things that don't show up until two years later in your project that you find there's a \$1M upgrade that would have been helpful in the beginning and help shape the project." – Session 2

Enhanced Tools (Must-Have votes among voters across all sessions)
PG&E provides a tool for local government/CCA engineers and consultants to design their own microgrids

B. PG&E provides information on where a microgrid would be less costly (e.g. existing storage/gen resources + minimal grid upgrades and more available capacity)

- Considered more of a must-have because this is where PG&E can provide detailed information to help pick the optimal location, identify critical buildings, and understand infrastructure capacity from the start
- There are questions around how to determine who would want to be included in the microgrid and how to bring these players together
- Because of the complexity of creating a microgrid, there's a desire to have a PG&E
 engineer identify what they have capacity for, what they can do, and take the lead on
 facilitating conversations with businesses that want to be on the grid
- Once a microgrid is established, there are questions around who could receive energy from the microgrid and how it would be controlled (line devices, meters at location, smart meters)

"Is PG&E expecting customers to come in with projects developed that they've worked on with a private company or is PG&E offering services to help those entities reach out and figure out where they can do this in the community?" – Session 1

"How would I know which gas stations want to be a part of my microgrid or which banks so they could put in money so they can be a part of the microgrid I'm building. How do you get those other players together? I don't want to just go around and nock on doors. Hey do you want to be a part of my microgrid? How do I get that going? I can microgrid for my own county government buildings, but how do I deal with the rest of the stuff? I don't know where the PG&E wires go" – Session 1

PG&E provides information on where a microgrid would be less costly (e.g. existing storage/gen resources + minimal grid upgrades and more available capacity)



Enhanced Tech Support (Session Builds)

Other ideas center around partnership, expertise, guidance and clear communication

Tre	at	cu	sto	m	e	rs
as	pa	rtn	ers	s i	n	a
pil	ot					

PG&E to help partner on identifying creative financing – microgrids will be a case study for future work; communities and PG&E need to be thought partners on the project

Speed up interconnection

Fast-tracking the interconnection process in less time than it typically takes; a lot of time is lost in this process today

Keep customers in the know

Quick access to information on where the natural gas is, where other facilities fall, what upgrades are going on in surrounding areas

Set clear and detailed expectations

PG&E provides timeline of step-bystep process of what to expect, when.

Provide a biz dev specialist

A "business development manager" who helps prospects understand how this could work for their community and provides resources to help develop a plan.

A communication & tracking portal

A web portal where applicants can interact and see where they are in the process, communicate with PG&E staff, monitor/track their project, get resources.



Enhanced Tech Support (Vendor/Contractor Callouts)

Vendors/contractors currently cover local outreach, project evaluation and technical support; greater transparency, more information and faster responses from PG&E is what is most important

Provide faster responses and help with fast-tracking interconnection

"[It would be helpful] knowing that we can get an interconnection fast tracked or get it in less time than a typical one. When you have a customer that is going to rely on the interconnection and we're not able to interconnect them for months, that is no help." — Session 5

"I think what this group needs is a team at the utility that can provide fairly quick turnaround responses to technical questions because people are going to hit decision points." — Session 5

Access to a PG&E point person who can provide local expertise

"It's also helpful to have direct contact with somebody in the region who knows the project, the scope and the process. This would give both the customer and the entity reassurance that the money and time are being spent in the best interests of all three parties." – Session 5

"When we're talking about distribution upgraders, I'm thinking it would start with lists of substations that you guys have and then get into those communities where you expect to still have a lot of PSPS events." – Session 5

Provide greater transparency and more detailed information to support vendors/contractors

"The biggest thing we need is support with the information that we need so we could build these projects, cooperation on the interconnection side of the house. I think to the extent that you guys provide us more with that information more easily, we can do a lot of the project evaluation and technical support." – Session 5

"If you can get us information on the substations, interconnection process, where natural gas is, where any other facilities fall, and what upgrades you're doing to the surrounding areas. All of that directly impacts the work we would do already." – Session 5



Application Process (Background & Questions)

Background

What are the issues or concerns that are important to you in an application process for enhanced technical support?

Starter Questions

How should PG&E ensure that qualified, serious applicants are not held up by applicants who simply want to "hold their space in the queue?"

Keep Things Simple Minimal Financial Threshold and some Project Framing Minimal Design Concept already Developed Not Sure

Communities may be at different stages of project identification and development. PG&E sees a need to ensure an equitable program application process. Which approach do you prefer?

Annual or Twice-Yearly Application Window First Come, First Served Allocate resources across counties Not Sure



'Keep things simple' appeals to those concerned about the exclusion of communities with fewer resources, but risks a flood of half-baked applications

A. Keep Things Simple

CONS

PROS

- Communities who need the microgrid most might not have the capacity to prepare the elements required in the other options.
- Other options will exclude communities with lower financial and staffing capacity.
- Risks those with half-baked applications applying to hold their space in the queue.
- Risks a company (ex: Tesla) blowing up the application process and excluding applicants with a higher level of risk/need

QUOTES

"I do have concerns around community equity. Having an \$1000 deposit and some preliminary design work is a low threshold, but it could be prohibiting for communities that may really need these assets or resources the most." -- Session 1

"It makes people want to jump to get into the queueeven if it's a half-baked idea." – Session 4

How should PG&E ensure that qualified, serious applicants are not held up by applicants who simply want to "hold their space in the queue?"

 Keep Things Simple
 Minimal Financial Threshold and some Project Framing
 Minimal Design Concept Already Developed

 A
 B
 C



Financial thresholds and project framing ensure serious and prepared applicants, but may exclude communities without funding or technical resources available

prohibitive to communities in need

B. Minimal Financial Threshold and some Project Framing

PROS

Seems essential to have some kind of plan and

analysis at a local level to ID potential microgrid

Presupposes a small amount of legitimate work on

acknowledging that there's a lot of info communities

the individual's part – but at the same time

Provides the appropriate amount of "gating" for

need to fully plan for a project like this

loading up the queue.

benefits.

Raises concerns surrounding community equity; while \$1,000 is a low threshold, it could be

CONS

 Financial commitment may have to go through a local government approval body, which could slow down the process QUOTES

communities are not necessarily going to have the lead to be prepared beforehand. So I want some way to keep it simple for those communities." -- Session 2

"Communities with less capacity or vulnerable

- "Having some kind of minimum investment so any entity who walks through the door has a generalized concept." – Session 4
- "These kinds of things, at least in my local government, have to go before an approval body. So requesting funding, even something as small as this, would have to go through an approval process that would take a lot of time and a lot of staff work to go into." Session 1

• Demonstrates a commitment on the applicant's part

applications, since there's a concern with entities

How should PG&E ensure that qualified, serious applicants are not held up by applicants who simply want to "hold their space in the queue?"

Keep Things Simple

Minimal Financial Threshold and some Project Framing

Minimal Design Concept Already Developed

B

C

27



Minimal design concept encourages applicants to "level set" on their plan, but may require coordination with PG&E and risks excluding disadvantaged communities

C. Minimal Design Concept Already Developed

CONS

PROS

- Prevents those with less serious applications from applying to hold their space in the queue
- Providing some kind of design concept will allow PG&E to ensure they're selecting projects that are most beneficial to communities
- Contractors may be available to do minimal design work for free to "get in" on the project
- Design requirement will encourage applicants to take a hard look at their initial plan versus getting in line for funding before thinking through the project.

- Disadvantaged communities who need these resources the most may not have the technical and financial capabilities to get a design to this stage without assistance from PG&E
- Achieving a minimum design concept may require some coordination and scoping with PG&E, which could be difficult pre-application

"I think it identifies a potential issue where people see this new opportunity and there's incentives available and they want to get into the queue to avoid missing out." -- Session 3

QUOTES

"I think a minimal design concept is something that will really encourage people to look at what their initial plan might be and sort through some of the options and maybe access PG&E technical assistance for that." -- Session 4

"Communities that are high-risk likely have the least capacity to investigate program opportunities, so targeted outreach is important." – Session 2

How should PG&E ensure that qualified, serious applicants are not held up by applicants who simply want to "hold their space in the queue?"

Minimal Design Concept Already Developed

Α

Keep Things Simple

3

Minimal Financial Threshold and some Project Framing

C



Annual or twice-yearly applications give applicants the time to gather resources and get their communities on board, but risk slowing down prepared projects

A. Annual or Twice-Yearly Application Window

PROS

CONS

QUOTES

- The cadence will be familiar to applicants who have experience working on grant cycles
- Helps communities to have a date to get everything together by to avoid those who are better organized monopolizing resources
- Gives disadvantaged communities time to complete the application before a deadline
- Provides communities with time to secure funding before a window

 Those who are ready to apply may have to wait up to 5 months to secure funding and resources for the project, which could significantly delay the project timeline "Certain regions will have a better response, a better ability to get things going quicker – having a deadline is important to make it more equitable." – Session 2

"I'm used to this grant cycle when we apply for grants on a schedule." – Session 3

"If you have the ability to act in a certain moment in time, you have to wait for your funding." – Session 4

Communities may be at different stages of project identification and development. PG&E sees a need to ensure an equitable program application process. Which approach do you prefer?

Annual or Twice-Yearly Application Window

First Come, First Serve

Allocate Resources Across Counties

Α

3

C



First come, first serve offers learning opportunities for future projects by giving priority to prepared communities, but raises equity concerns

B. First Come, First Serve

CONS

PROS

Because projects of this magnitude tend to take on a life of their own, a project that is ready to go shouldn't have to wait for an application window

Due to the complexity of the project at the community level, it's better to invest more into a few "pilot" cases and build out a better long-term process

Applications could end up aggregated into a single area, which doesn't serve the mission of regionalizing

This process would favor those who have the capacity to submit applications more quickly

Urges applicants to apply sooner to hold their space in the queue

QUOTES

"When a project is ready to go, waiting for an application window to come up might be impactful to the overall project." – Session 3

"This is really complicated stuff at the community level. So I would like to see a lot more resources going into developing a few pilots – less is more. This is a long-term strategy anyways, and we can build out a better process over the long run." – Session 4

"This is less in line with PG&E's goal of regionalizing. If all of your applications end up in one area, that doesn't serve the mission of regionalizing." – Session 1

Communities may be at different stages of project identification and development. PG&E sees a need to ensure an equitable program application process. Which approach do you prefer?

Annual or Twice-Yearly Application Window

First Come, First Serve

Allocate Resources Across Counties

Α

В

C



Allocating resources across counties feels more equitable, but raises questions related to population and access

C. Allocate Resources Across Counties

PROS

Feels more equitable to regions who aren't able to get resources together to apply as quickly

More in line with PG&E's movement toward serving territories regionally

Prevents private contractors from coming in and blowing up the application process for the rest of the state

CONS

Brings up issues relative to population, accessibility, and cost of infrastructure that would leave some places out of consideration

Risks a smaller county having to compete with a larger one that has more access to funding

Doesn't place focus on areas with greatest community impact from power shutoffs

QUOTES

"It felt equitable, like everyone had an opportunity to participate in the same fashion as everyone else. Certain regions just have a better ability to get things going quicker." – Session 1

"If we can allocate across counties, I won't worry about some private contractor coming in and blowing up the application process." – Session 1

"Is our pot of funding here based on population, or what is it based on? I would want to make sure that our county has access to funding – we're a geographically hard to reach county and I wouldn't necessarily want to compete with a county up north with more access to funding." – Session 1

Communities may be at different stages of project identification and development. PG&E sees a need to ensure an equitable program application process. Which approach do you prefer?

Annual or Twice-Yearly Application Window

First Come, First Serve

Allocate Resources Across Counties

Α

D

С

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Application Process (Session Builds)

Other ideas include pre-application technical support and prioritization of high-risk areas and tribal communities

Provide technical assistance to promising applicants pre-application

"If there's a way to get some technical assistance up front before making the financial commitment, PG&E could decide on that level of application to know whether it's worth us spending the time and resources to get to that stage in the process." – Session 2

Provide pre-application support to disadvantaged communities

"Potentially an understanding that PG&E can help some of the teams who have less resources or are less sophisticated to get them to the point where they could provide the level of detail required, because there might be some lower-income communities without the sophistication to be able to get there." – Session 3

Utilize PG&E data to determine communities with high-risk reliability issues

"PG&E has information about the transmission and distribution lines and you know, there's a lot of issues with reliability in certain areas. That could be a level of criteria put in place." – Session 4

Consider tribal set-asides within the application process

"We need to remember the importance of doing tribal set-asides or being careful that we allocate these funds while remembering that tribes are typically more remote and have fewer resources to choose from." – Session 1



Application Process (Vendor/Contractor Callouts)

Vendors/contractors recommend a phased application process and a clarification of program details

Start with first come, first serve to gauge the level of need

"First come, first serve as a starting point to see how many applications you're getting. If it's too much, reprioritize." — Session 5

Clarify the criteria for qualified applicants to determine extent of gating

"Local governments are a natural gatekeeper of themselves. And so, if a local government, for example, has gotten to the point where they are ready to move forward and seeking assistance, I don't know that you need to require a financial application fee." – Session 5

Clarify the desired development of the design process

"It's hard to know how far to get down the path of designing something. I think we need to air on the side of less design rather than running it too far and making a decision too early." – Session 5

Clarify ownership of the microgrid

"An important question for PG&E to consider would be who would own these things. Are there restrictions on ownership – in one sense, it might be easier for local governments if the private sector can own these facilities, but the private sector would take on the risk." – Session 5



Cost Offset Design (Background & Questions)

Background

PG&E distribution upgrades necessary to enable a community microgrid would normally be charged to that community. PG&E received commission approval to allocate up to \$27M per year to offset some portion of these costs. Eligible costs include:

- Enabling a section of the grid to disconnect from the larger grid
 (e.g., isolation devices)
- Operating the microgrid (e.g., microgrid controllers)
- Ensuring it is safe to operate (e.g., fault protection devices and hardening)

Starter Questions

The cost offset design can change, but we have to start somewhere. What percentage of eligible costs should be offset to begin with?

Let's Prove This Works Focus on Broad Access Initially Not Sure



Cost Offset Design (Session Feedback)

Participants are split on how to design cost offsets; proving the concept has the best guarantee of some early successes, but feels prone to inequities

A. Let's prove this works

- Because these projects are challenging to successfully complete, building 9 or so microgrids (~\$3M each) would provide learnings for future projects.
- If PG&E isn't offsetting a large amount of the cost, those who need it the most may not be able to get enough offset to commit to the project.
- Feels counterintuitive to attempt to fund a bunch of projects with less money allocated per project.
- Would provide a "roadmap" for future projects to get done more efficiently and effectively.
- "I think if in the first year of the program you got 9 microgrids funded and on their way to being up and running, that would be a tremendous success. You would learn a tremendous amount, and at that point you could adjust." – Session 3
- "You could fund as much as possible with the intent that it's a demonstration and educational project and that there's a collective agreement to learning and rolling forward future funding years more efficiently and effectively." – Session 1

B. Focus on broad access initially

- "Let's prove this works" doesn't feel equitable, because it would mean huge amounts of funding to the first few applicants and less for those who need time to get resources together.
- Does not risk heavily funding initial applicants and not getting any viable projects over the finish line
- Because \$27 million isn't much money and it's not clear what software or webbased support tools would cost/how long they would take to develop, it's better not to spend all funding initially
- "Even if we're competing as a county, [let's prove this works] is not really equitable, right? The amount of funding that one entity could get will be so significant that you'll effectively be leaving pennies for other entities." – Session
- "I think if the program gets overwhelmed and you get a lot of projects in the door but none make it over the finish line, that would diminish the overall benefit to communities." – Session 3

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What percentage of eligible costs should be offset to begin with?

Let's prove this works Focus on broad access initially

A B



Cost Offset Design (Session Builds)

Other ideas include a staggered approach to funding and a 100% cost offset to communities who need it

Stagger funding depending on size of project

Decrease funding between rounds to preserve capital

Competition between regions to spread funding across for learning opportunities

100% cost offset to communities most in need of resources

"Maybe some kind of sliding scale, depending on the size of the project and the square footage of critical facilities being addressed." – Session 2

"There's always the possibility of going down the path where 30% of first round projects are funded, then the next couple of projects go down to 20% funded, then the last couple projects are 10% funded. But \$27 million will go really fast." – Session 1

"Across regions you could have a competition within each region/across a few regions so that everyone in your service territory would be relatively close to the grid. The educational component of the investment would be really felt—the point isn't to get everyone on microgrids, it's about high-visibility learning opportunity." — Session 1

"I think there's probably something that could be done within the range of 100% cost offsets that maybe doesn't get everyone to 100% but gives some kind of priority on this advantage status." – Session 2



Cost Offset Design (Vendor/Contractor Callouts)

Vendors/contractors urge PG&E to prioritize funding to viable projects and desire clarification on what the cost offset will cover

Consider how many viable projects can be conducted

"I'm not an engineer, so I'm not sure how much one of these projects is really valued at, but it's a fairly small portion of the microgrid project. If the goal is to get them online quickly, it seems like a great option to prioritize bringing the most viable projects the quickest." – Session 5

Prioritize projects with preexisting resources for implementation

"If a project with existing assets is given priority bidding, it would address these assets sitting there that to some degree aren't being utilized to the full effect. So they could, in theory, help the larger grid while they're sitting there. But they can't do that without priority access." – Session 5

Utilize funding in first round to ID variability in project/upgrade costs

"You could start out with this [let's prove this works] in the first year to determine the variability in project costs and see how far below the \$3M mark you come up with on average for these projects. And in a year or two, you could modify that and provide broader access." — Session 5

Clarify what elements of the project the cost offset will cover

"Is there going to be any funding or cost offset available for the interconnection studies or any of the upgrades recommended by the interconnection department?" – Session 5



Project Prioritization (Background & Questions)

Background

In the context of limited resources, both for the Enhanced Technical Support aspects of the program, as well as the Cost Offsets, PG&E will need to consider how best to prioritize requests.

Starter Questions

What criteria should PG&E consider to best prioritize requests?

- Past PSPS events & Future potential for PSPS
- Total population benefiting (e.g. a water agency serving 250,000 people)
- The most urgent for public health, safety, and public interest
- Public Safety Leader support (e.g. County OES, city emergency leader, tribal government)
- Benefit to disadvantaged community/vulnerable populations
- Grid executability based on viability grid enhancements required
- Clear planning/design work already done
- Community utilized resources such as storage and/or solar
- Existing customer budget to ensure that the project can realistically be completed



Project Prioritization (Session Feedback)

Prioritization goals center around public interest, risk levels, and viability of proposed projects

Grid executability

"The likelihood of successful completion of a project is important because we're talking about where to put the resources – there might be some communities that think it's a great idea but there's a low likelihood of it actually happening." – Session 2

Benefit provided to disadvantaged communities

"Making sure disadvantaged communities are not left out of these programs. They pay into them like we all do – but sometimes, they don't have the resources they need to make use of it." – Session 3

Public safety leader support

"Definitely a high priority for our city is making sure emergency operations and other things like shelter sites have power. Things that are emergency resources to our community and other leading members coming into the city." – Session 4

Clear planning/design work done

"I'm certainly a fan of some work has already been done. So the clear planning design work is a good idea." – Session 2

Community-utilized resources

"Solar resources are a smart idea— imagine there's a bunch of solar panels in an area. All of a sudden, you could put them into a microgrid and this pre-existing resource is ready to go and make power." — Session 1

Most urgent for public health/safety/interest

"The most urgent public health and safety needs. Public interest should be factored in as well." – Session 3



Project Prioritization (Vendor/Contractor Callouts)

Other ideas for prioritization center around the key stakeholder/community engagement, the transferability of investments, and a critical look at vulnerable communities.

Key stakeholder and community engagement

"I think more broadly it's key stakeholder engagement and support. I think that if you only have one entity going after the application without already having engaged other stakeholders, the project is much more likely to struggle through the implementation process." — Session 2

Prioritize the educational component of investments to guide future projects

"The educational component or transferability of investments has to be a primary consideration here. \$27 million for projects that just quietly get done is not a good use of resources. If we do a project that benefits an underserved community and makes them more resilient, we have case studies that show how these can get done— not just in wealthy communities."—

Create criteria to score based on vulnerability and risk of PSPS events

"The need for microgrids based on an expected PSPS event in the future must be carefully weighed against the pure fact of being a vulnerable community. A rating/scoring methodology should be developed that considers both vulnerable customers/critical facilities as well as the probability of the community experiencing PSPS events in the future." – Session 4

Ensure population prioritization doesn't restrict those in need

"I would be strongly against option number 2, which is the total population benefiting. Just being in an area with a lower population to begin with. For critical facilities, I think despite the population number they serve would be central to the population, whatever that number is." – Session 1



Follow-up Feedback

What do you see as the key barriers to developing microgrids in your community?

What do you see as most helpful for PG&E to enable microgrids and resilience?



Follow-up Feedback (Barriers)

Today, participants don't have the capacity, resources or information needed to get started on such a complex initiative; PG&E would need to provide this additional support

Ability of a single entity to manage the full process

Lack of capacity to identify and build out projects

Lack of context/information on the project

Need for regulatory/logistical clarity from PG&E

Need for more direct access to information and PG&E technical staff

"I have seen very few entities with sufficient capacity/understanding of this type of deployment to be able to orchestrate them. They will require orchestration with multiple layers of stakeholders, engineers, finance entities, regulators, etc." – Session 1

"Lack of capacity (staff time, expertise, and funding) to identify potential projects and bring them forward." – Session 2 "Lack of information! We have found it quite difficult to collect sufficient current accurate distribution system information with which to evaluate potential microgrid options." — Session 3

"No regulatory clarity on multi-customer grids – will PG&E allow the development of third-party microgrids? Uncertain costs and timelines for interconnection." – Session 5 "Lack of access to grid data, e.g. sectional information, load information for certain circuits, etc. Lack of direct access to PG&E technical staff to discuss issues and questions one-on-one." – Session 5



Follow-up Feedback (Boosters)

PG&E can be helpful by providing up-front technical and scoping support and providing relevant data/scoping

Context on unexpected costs in the deployment process (e.g. upgrades to infrastructure, interconnection studies)

"If PG&E can create guard rails to guide the deployment process... the regulatory, rate/tariff and other details needs to be clear and simple to allow finance entities to reasonably calculate ROI and provide sufficient certainty that the economics are reliable and will remain consistent throughout the project." – Session 1

Up-front technical assistance from PG&E

"Up-front technical assistance in determining feasible and cost-effective project sites that would be covered by the program. Maps or other identification of potential sites by PG&E – that will be important for small and/or disadvantaged communities." – Session 2

Scoping on potential locations for the microgrid to ensure success

"Scoping of potential microgrid locations. One example is to synthesize the considerable work PG&E is performing, engineering, and planning (2-5 year plan) so that we are all certain effort and funding is wisely invested and appropriately ranked in terms of priority." – Session 3

Enable high-visibility learning opportunities for interested communities

"Require projects to share their design information somewhat publicly so that other projects can benefit from them, and to accelerate the process of standardization." – Session 5

Make staffers available to CCAs/local governments for consultation

"Make technical staffers directly available to CCAs and other local government entities to develop microgrid solutions that work for the community." – Session 5

Make data available to enable planning

"Interconnection processing resources and access to relevant data. Cost offsets for distribution upgrades would be very helpful." – Session 5

Appendix





Program Eligibility (Feedback 1)

Potential Additional Eligibility Criteria

Should there be a requirement for a minimum percentage of renewable energy?

YES / NO / NOT SURE

Program Eligibility Time: 15 C Space: Jonathan PG&E: Molly



Program Eligibility (Feedback 2)

Potential Additional Eligibility Criteria

Should projects be limited to those needed to address near-term fire season priorities?

YES / NO / NOT SURE

Program Eligibility Time: 15 C Space: Jonathan

PG&E: Molly



Enhanced Technical Support (Feedback 1)

Project Management Resources for PG&E Specific Tasks

Possibilities	Must-Have	Nice-to-Have	Not Sure
Establishing an end-to-end project management process for community-driven resilience projects	?	?	?
PG&E dedicate a portion of the resources to do proactive outreach to prioritized communities	?	?	?

Tech Support Time: 15 C Space: Jonathan



Enhanced Technical Support (Feedback 2)

Project Evaluation & Technical Support

Possibilities	Must-Have	Nice-to-Have	Not Sure
Helping local and tribal governments understand resilience options	?	?	?
Analyzing future PSPS exposure & identifying potential in-flight or planned PSPS mitigations	?	?	?
If a microgrid, identifying key project design considerations	?	?	?
Determine to what extent the project may qualify for CMEP cost offsets	?	?	?

Tech Support Time: 15 C Space: Jonathan



Enhanced Technical Support (Feedback 3)

Enhanced Tools

Possibilities	Must-Have	Nice-to-Have	Not Sure
PG&E provides a tool for city engineers and consultants to design their own microgrids	?	?	?
PG&E provides information on where a microgrid would be less costly (e.g. existing storage/gen resources + minimal grid upgrades and more available capacity)	?	?	?

Tech Support Time: 15 C Space: Jonathan



Application Process (Feedback 1)

How should PG&E ensure that qualified, serious applicants are not held up by applicants who simply want to "hold their space in the queue?"

A.

Keep Things Simple

Minimal threshold for applying at the risk of overwhelming and slowing the application review and approval process.

B.

Minimal Financial Threshold and some Project Framing

Such as a \$1,000 application fee and evidence of project leadership team, goals, resource plan, and budget.

C.

Minimal Design Concept already Developed

Such as assessment of critical loads and some initial design work already completed.

D.

Not Sure

Application Process Time: 15 C Space: Jonathan PG&E: Molly



Application Process (Feedback 2)

Communities may be at different stages of project identification and development. PG&E sees a need to ensure an equitable program application process.

Which approach do you prefer?

A. B. C. D.

Annual or Twice-Yearly Application Served Allocate resources Window

> Application Process Time: 15 C Space: Jonathan PG&E: Molly

Not Sure



Cost Offset Design (Feedback 1)

What percentage of eligible costs should be offset?

A.

Go Big

Start with a 100% cost offset at the risk of funding being insufficient to meet initial demand.

В.

Brace for Initial Demand

Start with a lower cost offset and later raise the percentage if offsets are not fully subscribed

C.

Not Sure

Cost Offset Time: 15 C Space: Jonathan PG&E: Molly



Project Prioritization (Brainstorm)

What criteria should PG&E consider to best prioritize requests?

- Past PSPS events & Future potential for PSPS
- Total population benefiting (e.g. a water agency serving 250,000 people)
- The most urgent for public health, safety, and public interest
- Public Safety Leader support (e.g. County OES, city emergency leader, tribal government)
- Benefit to disadvantaged community/vulnerable populations
- · Grid executability based on viability grid enhancements required
- Clear planning/design work already done
- Community utilized resources such as storage and/or solar
- Existing customer budget to ensure that the project can realistically be completed

Prioritization
Time: 15
C Space: Jonathan



Project Prioritization (Brainstorm)

How should we prioritize low-income, disadvantaged, access and functional needs, and other vulnerable communities?

Brainstorm:

Other approaches?

Prioritization
Time: 15
C Space: Jonathan



The Community Microgrid Enablement Program

CMEP Objective: PG&E is seeking to deepen its partnership with communities seeking resilience by (1) actively supporting the identification and design of resilience projects and (2) removing barriers to microgrid deployment.

CMEP Status: PG&E's CMEP framework was approved by the CPUC on 6/11; we are now in the outreach and detailed program design phase.

CMEP Components and Implementation Timeframes:

- Dedicated team and enhanced processes to support community resilience planning, design and implementation (2020)
- Enhanced tools and information to support microgrid development (2020 -2021)
- Cost Offsets for distribution grid upgrades to enable community-driven multi-customer microgrids (2021)
- Tariffs and Operational Agreements to enable use of PG&E's grid for community-driven multicustomer microgrids (2021)



What is a Community Microgrid?

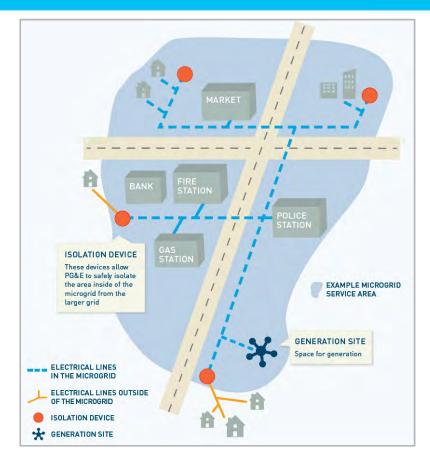
A **community microgrid** may allow PG&E to safely provide electricity using generation during an outage (by disconnecting from the main grid).

These microgrids would be designed to serve the portions of communities that include community resources, such as:

- Hospitals
- Police and fire stations
- Gas stations and markets

The community microgrid site selection process would likely consider prior and expected future PSPS events, along with other conditions that indicate an area is prone to outages.

Each community microgrid would be unique and designed based on a number of different variables that dictate the size of the microgrid, what community services are served and what elements are included in the design.



The diagram above represents an approximate layout of a community microgrid. $_{56}$ The layout and dimensions are approximate and for illustrative purposes only.

Appendix 2

Workshop Agendas, Attendee Lists, and Meeting Minutes

CMEP Microgrid Session 1:

Attendees:

- Alyssa Carroll
- Anne Kloose: Division Manager of Sustainability, City of Fresno Sustainability Division
- Ashley Paulsworth: Sustainability Program Manager, County of Monterey
- Brent Slama: Community & Economic Development Director, City of Soledad
- Chris Read: Sustainability Manager, San Luis Obispo
- Daniel Tutt: Utilities Engineer at the CPUC Energy Division Resiliency and Microgrids Team
- Dore Bietz: Tuolumne Me-Wuk Tribal CERT Program Manager
- Kevin Thompson: Engineering Technician Specialist, County of Santa Barbara
- Linnea Jackson: General Manager, Hoopa Valley Public Utilities District
- Liz Peterson: Senior Administrative Analyst/OES Coordinator, Tuolumne County
- Miguel Barcenas: Interim Deputy Director, Engineering & Planning, San Luis Obispo
- Tony Pastore: Energy & Sustainability Consultant, AgEnergySystems
- Roy Hapeman: County Energy Manager, Santa Barbara

Agenda:

	Item	Lead	Time
1	Safety and Intros	PG&E	5 minutes
2	Today's Agenda &	C Space	5 minutes
	Objectives		
3	About CMEP and	PG&E	15 minutes
	where we need your		
	help		
4	Framework and ground	C Space	5 minutes
	rules for workshop		
5	Program eligibility	PG&E/C Space	15 minutes
6	Application process	PG&E/C Space	15 minutes
7	Enhanced Technical	PG&E/C Space	15 minutes
	Support		
8	Cost Offset Design	PG&E/C Space	15 minutes
9	Project Prioritization	C Space	15 minutes
10	Open Feedback	PG&E	5 minutes
11	Wrap up & next steps	PG&E	5 minutes

Desired Meeting Outcomes:

- Gather communities' thoughts and suggestions regarding the CMEP to help guide final program design.
- Ensure communities know how to provide additional feedback to PG&E after today's discussion.

Questions:

- Who may "own" the microgrid? Are there restrictions re: ownership?

- Could we have one point of contact at PG&E for the duration of the project from design to implementation?
- How focused will the program be to serve the communities located in Tier 2 & 3 communities during PSPS? Would this include Fresno?
- Does PGE have draft program eligibility requirements? Tribal governments and entities should be included.
- How do we determine who would want to be part of the microgrid? Can PG&E help get these players together?
- What is the program objective? Does PG&E expect customers to come in with projects developed, or is PG&E offering services to help entities figure out how this can work in their communities?
- Who would be receiving energy from this microgrid? How would a particular facility "earn the right" or "purchase the right" to turn on their meter to receive energy from the generator?
- Is the \$27M in capital costs plus additional funds for staff and soft costs, or is this the overall project budget?
- Would these microgrids be on fixed sites?

Summarized Notes:

PG&E provided an overview of the Community Microgrid Enablement Program's objectives, status, and implementation timeframes.

PG&E provided an overview on what a community microgrid is and what it would be designed to serve.

PG&E introduced areas where they need additional assistance [Program Eligibility, Application Process, Enhanced Technical Support, Cost Offset Design, and Project Prioritization].

C Space provided overview framework for the session.

Program Eligibility:

PG&E provided an overview of existing program eligibility.

Session participants weighed in on eligibility requirements for a minimum percentage of renewable energy and whether projects should be limited to those needed to address near-term fire season priorities.

Application Process:

PG&E provided an overview of issues or concerns that may be important to attendees during the application process.

Session participants weighed in on how PG&E should ensure that qualified, serious applicants are not held up applicants who simply want to "hold their space in the queue", evaluating three different approaches for the application process [Keep Things Simple, Minimal Financial Threshold and some Project Framing, Minimal Design Concept already Developed].

Session participants weighed in on additional ideas for the application process, including tailoring resources to specific community needs [e.g. providing additional assistance prior to application for communities who need support], limiting applications by county or company, and clarifying ownership of the microgrids [e.g. public vs. private sector].

Session participants weighed in on approaches to ensure an equitable program application process, with options for an Annual or Twice-Yearly Application Window, First Come First Serve, or Allocation of Resources across Counties.

Session participants contributed additional ideas for an equitable program application process, including tribal set-asides and clarification of the intended outcome of the project.

Enhanced Technical Support

PG&E provided an overview of the approved framework to manage pre-application consulting services and intake of qualifying* local and tribal government resiliency projects.

Session participants weighed in on prioritization of project management resources for PG&E specific tasks [Establishing an end-to-end project management process for community-driven resiliency projects, Staffing Project Managers to provide consistent support throughout the project lifecycle, Providing support in navigating relevant PG&E processes (e.g. interconnection)].

Session participants provided additional ideas for prioritization of project management resources for PG&E specific tasks, including a web portal where applicants can interact with the process/communicate with PG&E staff/track their project/request resources. Additionally, participants recommended that for those who do not have the resources for this project, PG&E work with them to develop a plan and understand how this process could work in their communities.

Session participants weighed in on prioritization of project evaluation and technical support [Helping local and tribal governments understand resilience options, Analyzing future PSPS exposure and identifying potential in-flight or planned PSPS mitigations, If a microgrid, identifying key project design considerations, Determine to what extent the project may qualify for CMEP cost offsets].

Session participants weighed in on prioritization of enhanced tools [PG&E provides a tool for city engineers and consultants to design their own microgrids, PG&E provides information on where a microgrid would be less costly (e.g. existing storage/gen resources + minimal grid updates and more available capacity)].

Session participants weighed in with their own ideas for prioritization of enhanced tools, including considerations for the taking energy and trans-thermal energy to store from the microgrid to meet carbon-neutral objectives.

Cost Offset Design

PG&E introduced commission approval to offset some portion of the microgrid development costs normally charged to customers, including costs associated with isolation devices, microgrid controllers, and fault protection devices and hardening.

Session participants weighed in on what percentage of eligible costs should be offset [Go Big vs. Brace for Initial Demand].

Session participants provided additional ideas for cost offset design, including a competition within regions to test out the process and create high-visibility learning opportunities.

Project Prioritization

PG&E introduced the need to consider how to best prioritize requests given limited resources and provided a list of criteria that PG&E should potentially consider to best prioritize requests, including how to prioritize low income, disadvantaged access, functional needs, and other vulnerable communities.

Session participants identified areas of high-risk power loss (e.g. risk and frequency of power loss), overlap between high-risk power loss and disadvantaged communities, and a focus on developing pilot projects in disadvantaged communities as high-visibility learning opportunities.

Closing Discussion

PG&E closed the discussion with questions on key barriers to developing microgrids in communities and elements that would be most helpful for PG&E to enable microgrids and resilience.

Wrap Up and Next Steps

PG&E provided next steps for the drafting of final program details and submission to the CPUC in Mid-August and informed participants on how to submit additional feedback to be incorporated into the final program details and submission.

PG&E thanked participants for their input.

The meeting adjourned.

CMEP Microgrid Session 2:

Attendees:

- Adrienne Etherton: Sustainability Manager, City of Brisbane
- Alberto Colombo: CEO, DERNetSoft
- Cara Koepf
- Catrina Christian: Emergency Services Specialist, City of San Leandro- Los Altos
- Dave Fribush: Technical Advisor, Energy Storage/Emerging Technologies, Los Altos
- Edie Schaffer: Program Specialist, Santa Clara
- Hoi-Fei Mok: Sustainability Manager, City of San Leandro
- Jeremy Dennis: Town Manager, Portola Valley
- Jonathan Abendschein: Senior Resource Planner, Utilities, Palo Alto
- Kim Springer: Energy and Water Program Manager, County of San Mateo
- Leslie Brown: Director of Customer Care, Peninsula Clean Energy
- Louis Sun: Deputy Director of Public Works-Wastewater, City of Pacifica
- Marcos Santiago: Community Energy Analyst, San Jose Clean Energy
- Nicole Scott: Senior Management Analyst, City of San Carlos
- Sarah Kolarik: Environmental Analyst, City of San Pablo
- Zoe Elizabeth: Senior Energy Consultant, Silicon Valley Clean Energy
- Erik Pearson: Environmental Services Manager, City of Hayward

Agenda:

	Item	Lead	Time
1	Safety and Intros	PG&E	5 minutes
2	Today's Agenda & Objectives	C Space	5 minutes
3	About CMEP and where we need your help	PG&E	15 minutes
4	Framework and ground rules for workshop	C Space	5 minutes
5	Program eligibility	PG&E/C Space	15 minutes
6	Enhanced Technical Support	PG&E/C Space	15 minutes
7	Application Process	PG&E/C Space	15 minutes
8	Cost Offset Design	PG&E/C Space	15 minutes
9	Project Prioritization	C Space	15 minutes
10	Open Feedback	PG&E	5 minutes
11	Wrap up & next steps	PG&E	5 minutes

Desired Meeting Outcomes:

- Gather communities' thoughts and suggestions regarding the CMEP to help guide final program design.
- Ensure communities know how to provide additional feedback to PG&E after today's discussion.

Questions:

- How does this program co-exist with other CCA resilience programs?
- Would PG&E design the tool for city engineers and consultants to design their own microgrids, or is this something that's already developed? How would this work?
- Would PG&E cover generation and storage for the microgrid? This can be costly.
- What if PG&E is sectionalizing the area? Will this change the level of risk for outages in certain areas?
- What types of buildings does PG&E have in mind for connection to the microgrid? Is it a focus on prioritization of public facilities over private?

Summarized Notes:

PG&E provided an overview of the Community Microgrid Enablement Program's objectives, status, and implementation timeframes.

PG&E provided an overview on what a community microgrid is and what it would be designed to serve.

PG&E introduced areas where they need additional assistance [Program Eligibility, Application Process, Enhanced Technical Support, Cost Offset Design, and Project Prioritization].

C Space provided overview framework for the session.

Program Eligibility:

PG&E provided an overview of existing program eligibility.

Session participants weighed in on eligibility requirements for a minimum percentage of renewable energy and whether projects should be limited to those needed to address near-term fire season priorities.

Session participants emphasized the importance of considering battery storage, solar storage in eligibility considerations. Session participants additionally flag the need to consider other types of natural disasters that contribute to high-risk power loss, along with the prioritization of communities in need.

Enhanced Technical Support

PG&E provided an overview of the approved framework to manage pre-application consulting services and intake of qualifying* local and tribal government resiliency projects.

Session participants weighed in on prioritization of project management resources for PG&E specific tasks [Establishing an end-to-end project management process for community-driven resiliency projects, Staffing Project Managers to provide consistent support throughout the project lifecycle, Providing support in navigating relevant PG&E processes (e.g. interconnection)].

Session participants emphasized the need to consider equity in the technical support provided, particularly for smaller towns or towns with less resources. Entities that may be prioritized in the program [e.g. high fire risk/disaster areas, staffing constraints, financially burdened communities] may not be able to navigate these processes as seamlessly.

Other ideas included PG&E providing a timeline and step-by-step process of what would be expected of communities throughout the process.

Session participants weighed in on prioritization of project evaluation and technical support [Helping local and tribal governments understand resilience options, Analyzing future PSPS exposure and identifying potential in-flight or planned PSPS mitigations, If a microgrid, identifying key project design considerations, Determine to what extent the project may qualify for CMEP cost offsets].

Session participants emphasized the need to perform targeted outreach to high-risk communities who may not have the capacity to navigate this program.

Session participants weighed in on prioritization of enhanced tools [PG&E provides a tool for city engineers and consultants to design their own microgrids, PG&E provides information on where a microgrid would be less costly (e.g. existing storage/gen resources + minimal grid updates and more available capacity)].

Session participants emphasized the need for assistance from PG&E to understand the feasibility of the microgrid in their area along with the need for PG&E input and resources [e.g. relevant information like hosting capacity] throughout the design process.

Other ideas included PG&E using their own perspective and data to analyze and identify areas which will be most efficient/effective to sectionalize.

Application Process:

PG&E provided an overview of issues or concerns that may be important to attendees during the application process.

Session participants weighed in on how PG&E should ensure that qualified, serious applicants are not held up applicants who simply want to "hold their space in the queue", evaluating three different approaches for the application process [Keep Things Simple, Minimal Financial Threshold and some Project Framing, Minimal Design Concept already Developed].

Session participants expressed the need for PG&E to clearly communicate the stages of the project and for the project to move through these stages with the expectation that PG&E will check in and evaluate at each stage. They also flagged that there may be legitimate reasons that a microgrid could not work in specific locations.

Session participants weighed in on approaches to ensure an equitable program application process, with options for an Annual or Twice-Yearly Application Window, First Come First Serve, or Allocation of Resources across Counties.

Other ideas included PG&E performing outreach to ask applicants what level of support they have/need, as some applicants may have plenty of technical experience/consultants on board while others may

want to apply but not have the resources. Additionally, session participants recommended limiting the number of times jurisdictions can apply for the program.

Cost Offset Design

PG&E introduced commission approval to offset some portion of the microgrid development costs normally charged to customers, including costs associated with isolation devices, microgrid controllers, and fault protection devices and hardening.

Session participants weighed in on what percentage of eligible costs should be offset [Go Big vs. Brace for Initial Demand].

Other ideas included a 'sliding scale' depending on the size of the project (e.g. square footage of critical facilities), a 100% offset with prioritization to communities that truly need it, and a percentage offset for design depending on how CMEP funding can be stacked with SCIP and CCA funding.

Project Prioritization

PG&E introduced the need to consider how to best prioritize requests given limited resources and provided a list of criteria that PG&E should potentially consider to best prioritize requests, including how to prioritize low income, disadvantaged access, functional needs, and other vulnerable communities.

Session participants identified PSPS events, urgency for public health, clear planning/design work, and the likelihood of the successful completion of the project as top areas for prioritization of requests.

Additional ideas included a robust outreach component and priority technical support to underserved communities, factoring in communities impacted by climate change and sea level rise, existing grid issues, and specification of what exactly is being protected with the microgrid (e.g. prioritization of public facilities over private).

Closing Discussion

PG&E closed the discussion with questions on key barriers to developing microgrids in communities and elements that would be most helpful for PG&E to enable microgrids and resilience.

Wrap Up and Next Steps

PG&E provided next steps for the drafting of final program details and submission to the CPUC in Mid-August and informed participants on how to submit additional feedback to be incorporated into the final program details and submission.

PG&E thanked participants for their input.

The meeting adjourned.

CMEP Microgrid Session 3:

Attendees:

- Aaron Laurel: City Manager/Port CEO, West Sacramento
- Alexia Retallack: Marketing and Government Affairs, Pioneer Community Energy Placer County
- Brian Guth: Interim Tribal Administrator, Auburn
- Chuck Heisleman: Pioneer Community Energy
- Dave Carter: Principal Engineer, Schatz Energy Research Center, Humboldt County
- Gordon Samuel: Assistant General Manager & Director of Power Resources, Valley Clean Energy
- Grant Hunsicker: Director of General Services, Butte County
- Jim Zoellick: Schatz Energy Research Center, Humboldt County
- John Smith: Director of Public Works, City of Fort Bragg
- Katie Van Dyke: Climate Action Program Manager, City of Berkeley Office of Energy & Sustainable Development
- Kevin Perkins: Planning Manager, Yuba County Community Development
- Mahayla Slackerelli: Account Services Manager, Redwood Coast Energy Authority
- Paul Cummings: Assistant Electric Utility Director, Roseville Electric Utility
- Peter Lehman: Environmental Resources Engineering, Humboldt County
- Rebecca Boyles: Director of Customer Care and Marketing, Valley Clean Energy
- Tim Kiser: City Manager, City of Grass Valley
- Brian Ring: Assistant Chief Administrative Office, Butte County

Agenda:

	Item	Lead	Time
1	Safety and Intros	PG&E	5 minutes
2	Today's Agenda & Objectives	C Space	5 minutes
3	About CMEP and where we need your help	PG&E	15 minutes
4	Framework and ground rules for workshop	C Space	5 minutes
5	Program eligibility	PG&E/C Space	15 minutes
6	Enhanced Technical Support	PG&E/C Space	15 minutes
7	Application Process	PG&E/C Space	15 minutes
8	Cost Offset Design	PG&E/C Space	15 minutes
9	Project Prioritization	C Space	15 minutes
10	Open Feedback	PG&E	5 minutes
11	Wrap up & next steps	PG&E	5 minutes

Desired Meeting Outcomes:

- Gather communities' thoughts and suggestions regarding the CMEP to help guide final program design.
- Ensure communities know how to provide additional feedback to PG&E after today's discussion.

Questions:

- Is this related to distribution only, or can it involve transmission?
- Can you clarify if PG&E is looking at using existing distribution lines for the microgrids, or new distribution lines?
- Would PG&E cover generation and storage for the microgrid? This can be costly.
- What if PG&E is sectionalizing the area? Will this change the level of risk for outages in certain areas?
- What types of buildings does PG&E have in mind for connection to the microgrid? Is it a focus on prioritization of public facilities over private?

Summarized Notes:

PG&E provided an overview of the Community Microgrid Enablement Program's objectives, status, and implementation timeframes.

PG&E provided an overview on what a community microgrid is and what it would be designed to serve.

PG&E introduced areas where they need additional assistance [Program Eligibility, Application Process, Enhanced Technical Support, Cost Offset Design, and Project Prioritization].

C Space provided overview framework for the session.

Program Eligibility:

PG&E provided an overview of existing program eligibility.

Session participants weighed in on eligibility requirements for a minimum percentage of renewable energy and whether projects should be limited to those needed to address near-term fire season priorities.

Session participants emphasized the need to consider broader resiliency benefits beyond PSPS events and flagged that not all communities are the same and renewable energy may not provide the flexibility some communities need. Additionally, session participants emphasized the need to focus on remote communities/vulnerable communities at the grid edge [e.g. Tribal communities], and recommended that PG&E look at grid resiliency issues in order to meet these broader community needs.

Enhanced Technical Support

PG&E provided an overview of the approved framework to manage pre-application consulting services and intake of qualifying* local and tribal government resiliency projects.

Session participants weighed in on prioritization of project management resources for PG&E specific tasks [Establishing an end-to-end project management process for community-driven resiliency projects, Staffing Project Managers to provide consistent support throughout the project lifecycle, Providing support in navigating relevant PG&E processes (e.g. interconnection)].

Session participants emphasized the need for PG&E to perform proactive outreach to communities in need. Additionally, session participants recommended technical support from PG&E early in the process to provide communities with access to engineers and information for planning purposes [e.g. distribution, transmission, other infrastructure locations].

Session participants weighed in on prioritization of project evaluation and technical support [Helping local and tribal governments understand resilience options, Analyzing future PSPS exposure and identifying potential in-flight or planned PSPS mitigations, If a microgrid, identifying key project design considerations, Determine to what extent the project may qualify for CMEP cost offsets].

Session participants emphasized the need to mitigate the impact of PSPS events on communities who are disproportionately affected, along with an understanding of project qualification for CMEP cost offsets to identify the feasibility of the project.

Other ideas included PG&E serving as partners on creative financing to provide "thought partnership" and create high-visibility learning opportunities for future grids.

Session participants weighed in on prioritization of enhanced tools [PG&E provides a tool for city engineers and consultants to design their own microgrids, PG&E provides information on where a microgrid would be less costly (e.g. existing storage/gen resources + minimal grid updates and more available capacity)].

Session participants flagged the need for PG&E data to help communities better understand where capacity/existing infrastructure is and how much money they would need to commit to the project.

Application Process:

PG&E provided an overview of issues or concerns that may be important to attendees during the application process.

Session participants weighed in on how PG&E should ensure that qualified, serious applicants are not held up applicants who simply want to "hold their space in the queue", evaluating three different approaches for the application process [Keep Things Simple, Minimal Financial Threshold and some Project Framing, Minimal Design Concept already Developed].

Session participants expressed the need for flexibility within the application process to allow PG&E to help those who are less sophisticated/do not have the necessary resources to get to the design level required for application. Additionally, they recommended assistance to lower income, disadvantaged, or rural communities who do not have the internal capacity to put together a serious application.

Session participants weighed in on approaches to ensure an equitable program application process, with options for an Annual or Twice-Yearly Application Window, First Come First Serve, or Allocation of Resources across Counties.

While they agreed that the annual or twice-yearly application window would be most equitable and provide communities with time to gather resources, session participants flagged that projects of this magnitude could be disadvantaged if they have a project "ready to go" and must wait for the next application window.

Cost Offset Design

PG&E introduced commission approval to offset some portion of the microgrid development costs normally charged to customers, including costs associated with isolation devices, microgrid controllers, and fault protection devices and hardening.

Session participants weighed in on what percentage of eligible costs should be offset [Go Big vs. Brace for Initial Demand].

Session participants flagged that CCAs and broader community coalitions must play a role in the cost offset design to better speak to local needs and capacity.

A subset of session participants recommended fully funding projects with the \$27M in the first year to create successful high-visibility learning opportunities for future years.

Project Prioritization

PG&E introduced the need to consider how to best prioritize requests given limited resources and provided a list of criteria that PG&E should potentially consider to best prioritize requests, including how to prioritize low income, disadvantaged access, functional needs, and other vulnerable communities.

Session participants identified PSPS events and urgent public health needs as critical in project prioritization.

Additional ideas included prioritization of electric-only customers, areas with a significant elderly community, and a specific carve-out for disadvantaged communities.

Closing Discussion

PG&E closed the discussion with questions on key barriers to developing microgrids in communities and elements that would be most helpful for PG&E to enable microgrids and resilience.

Session participants flagged the need for PG&E's assistance on infrastructure and maintenance costs and the ability for buildings to share under a single meter to mitigate costs.

Additionally, session participants flagged the difficulty of scoping for microgrids with a lack of detailed information on the PG&E facility, the amount of load being handled there, and a broader understanding of what potential costs may be.

Session participants recommend that PG&E speak to CCAs, tribal governments, community groups, and others who may be impacted.

Wrap Up and Next Steps

PG&E provided next steps for the drafting of final program details and submission to the CPUC in Mid-August and informed participants on how to submit additional feedback to be incorporated into the final program details and submission.

PG&E thanked participants for their input.

The meeting adjourned.

CMEP Microgrid Session 4:

Attendees:

• Alan Flora: City Manager, Clearlake

• Brittani Gallagher: CleanPowerSF

• Carol Huchingson: Administrative Officer, Lake County

• Cristine Condon: Energy & Sustainability Analyst, County of Sonoma

• Cindy Cortez: Sustainability Fellow with Climate Corps, Contra Costa County

• Cory Bytof: Sustainability Program Manager, City of San Rafael

• Danielle Baker: Senior Customer Care Specialist, Sonoma Clean Power

• Darcie Antle: Disaster Recovery/County Finance, County of Mendocino

• Diane Ramire: Project Manager, City of Petaluma

• Edwin Smith: Vise Chairman, Bear River Band of the Rohnerville Rancheria Tribal Government

• Jana Ganion: Director of Sustainability and Government Affairs at Blue Lake Rancheria

• Jason Nutt: Departmental Director, City of Santa Rosa

• Patrick Carter: Management Analyst, City of Petaluma

• Rachel DiFranco: Sustainability Manager, City of Fremont

• Tasha Wright: Sustainability Coordinator, City of Santa Rosa

• Trevor Hunter: Water Department, City of Petaluma

Agenda:

	Item	Lead	Time
1	Safety and Intros	PG&E	5 minutes
2	Today's Agenda & Objectives	C Space	5 minutes
3	About CMEP and where we need your help	PG&E	15 minutes
4	Framework and ground rules for workshop	C Space	5 minutes
5	Program eligibility	PG&E/C Space	15 minutes
6	Enhanced Technical Support	PG&E/C Space	15 minutes
7	Application Process	PG&E/C Space	15 minutes
8	Cost Offset Design	PG&E/C Space	15 minutes
9	Project Prioritization	C Space	15 minutes
10	Open Feedback	PG&E	5 minutes
11	Wrap up & next steps	PG&E	5 minutes

Desired Meeting Outcomes:

- Gather communities' thoughts and suggestions regarding the CMEP to help guide final program design.

- Ensure communities know how to provide additional feedback to PG&E after today's discussion.

Questions:

- Will PG&E own and operate the transmission and distribution systems associated with the microgrid?
- Is the community responsible for components of generation and storage?
- Are communities designing, building, owning, and operating these microgrids on their own? Where does PG&E support come into play?
- What does proactive outreach actually mean? Is it a broad feasibility lens or more initial outreach to communities within the eligibility criteria?
- What extent will the project qualify for cost offsets? Is PG&E owning generation?
- Who are the desired applicants and what percentage of costs will be on the applicant versus covered by PG&E as a high-visibility learning opportunity?
- Should we be thinking about solar and battery storage as a standalone component?
- Will this program be for community microgrids, facility microgrids, or both?
- Who is operating the microgrid? When we build ours, would we essentially become a mini utility to own and operate the microgrid? Would we need IT staff, cybersecurity staff, the electrical facilities, staff to own and operate it? Who manages these factors?

Summarized Notes:

PG&E provided an overview of the Community Microgrid Enablement Program's objectives, status, and implementation timeframes.

PG&E provided an overview on what a community microgrid is and what it would be designed to serve.

PG&E introduced areas where they need additional assistance [Program Eligibility, Application Process, Enhanced Technical Support, Cost Offset Design, and Project Prioritization].

C Space provided overview framework for the session.

Program Eligibility:

PG&E provided an overview of existing program eligibility.

Session participants weighed in on eligibility requirements for a minimum percentage of renewable energy and whether projects should be limited to those needed to address near-term fire season priorities.

Session participants flagged the need to incorporate renewable energy into the microgrid to avoid the decommission of infrastructure within the next few years, particularly as diesel increases the pollution profile in disadvantaged communities.

Additionally, session participants advised the consideration of additional potential emergencies not related to PSPS, including prioritizing tribal communities who have never had reliable access to the grid.

Enhanced Technical Support

PG&E provided an overview of the approved framework to manage pre-application consulting services and intake of qualifying* local and tribal government resiliency projects.

Session participants weighed in on prioritization of project management resources for PG&E specific tasks [Establishing an end-to-end project management process for community-driven resiliency projects, Staffing Project Managers to provide consistent support throughout the project lifecycle, PG&E dedicates a portion of the resources to do proactive outreach to prioritized communities].

Session participants emphasized the need for an end-to-end project management process for communities and dedicating a portion of the resources to proactive outreach, citing a lack of staffing resources that make it difficult to imagine accomplishing a project like this one without PG&E resources and guidance.

Session participants advise more targeted technical assistance to communities who do not have the capacity for interconnection agreements, transmission, and distribution.

Session participants expressed desire for PG&E assistance with facilitating conversations between communities and the CPUC for assistance on energy metering.

Session participants weighed in on prioritization of project evaluation and technical support [Helping local and tribal governments understand resilience options, Analyzing future PSPS exposure and identifying potential in-flight or planned PSPS mitigations, If a microgrid, identifying key project design considerations, Determine to what extent the project may qualify for CMEP cost offsets].

Session participants flagged that navigation of PG&E application processes can be difficult for communities to navigate and emphasize the need for PG&E to clearly express what the program looks like and how to navigate it.

Session participants weighed in on prioritization of enhanced tools [PG&E provides a tool for city engineers and consultants to design their own microgrids, PG&E provides information on where a microgrid would be less costly (e.g. existing storage/gen resources + minimal grid updates and more available capacity)].

Application Process:

PG&E provided an overview of issues or concerns that may be important to attendees during the application process.

Session participants emphasized the need to clarify whether microgrids are intended to be owned by the public or private sector to determine whether local governments or private sector energy companies are responsible for providing funding and maintaining the grids.

Session participants weighed in on how PG&E should ensure that qualified, serious applicants are not held up applicants who simply want to "hold their space in the queue", evaluating three different approaches for the application process [Keep Things Simple, Minimal Financial Threshold and some Project Framing, Minimal Design Concept already Developed].

Session participants were largely in favor of some preliminary work being done prior to the application process to minimize those trying to "hold their space in the queue". Additionally, session participants

flagged the need for PG&E assistance in the identification of critical loads to take this impetus off of community staff.

Session participants weighed in on approaches to ensure an equitable program application process, with options for an Annual or Twice-Yearly Application Window, First Come First Serve, or Allocation of Resources across Counties.

Session participants cautioned that a first come, first serve approach could exclude disadvantaged communities in need of support to complete their application process. Additionally, they expressed hesitation on the allocation of resources across counties, which they cautioned could create disparities in rural areas who need microgrids the most.

A subset of session participants advised allowing applicants to specify the community that would be served by the grid to allow for prioritization of disadvantaged communities.

Cost Offset Design

PG&E introduced commission approval to offset some portion of the microgrid development costs normally charged to customers, including costs associated with isolation devices, microgrid controllers, and fault protection devices and hardening.

Session participants weighed in on what percentage of eligible costs should be offset [Go Big vs. Brace for Initial Demand].

Session participants flagged the need to establish success within the first few projects (e.g. making sure they are coordinated with the local grid, that they're operated safely, that they provide benefits to individuals in the community in terms of reliability).

Additionally, session participants cautioned that this speaks to the capacity of smaller governments/communities or tribal governments to shoulder the full responsibility of the microgrid and their own electrical system.

Project Prioritization

PG&E introduced the need to consider how to best prioritize requests given limited resources and provided a list of criteria that PG&E should potentially consider to best prioritize requests, including how to prioritize low income, disadvantaged access, functional needs, and other vulnerable communities.

Session participants identified emergency resources to communities and community leaders (e.g. tribal governments, emergency operations/shelter sites), past PSPS events and future potential for PSPS, and the prioritization of disadvantaged communities as key elements of prioritization.

Other ideas included stakeholder engagement and support, prioritization of non-English or ESL communities and multi-generational families, and community-specific resiliency needs.

Closing Discussion

PG&E closed the discussion with questions on key barriers to developing microgrids in communities and elements that would be most helpful for PG&E to enable microgrids and resilience.

Session participants flagged barriers of capacity when it comes to the development of microgrids, acknowledging that they are complicated and involve economic, safety, and infrastructure considerations.

Wrap Up and Next Steps

PG&E provided next steps for the drafting of final program details and submission to the CPUC in Mid-August and informed participants on how to submit additional feedback to be incorporated into the final program details and submission.

PG&E thanked participants for their input.

The meeting adjourned.

CMEP Microgrid Session 5:

Attendees:

- Abbie Laugtug: Policy Manager, Government Affairs, San Jose
- AJ Falcone: Product Engineering Manager, Concentric Power, San Francisco Bay Area
- Allie Dietro: Chief Strategist, REIMAGINE POWER, San Francisco
- Brady Borderching: Coast Director Government Affairs, FuelCell Energy Inc.
- Dara Salour: Program Manager, Alternative Energy Systems Consulting (AESC) Inc., Oakland
- Gerry Vurciaga: Founder and President, Energy Consulting Service
- Heather Curlee: Energy and Infrastructure Council, Wilson Sonsini
- Jin Noh: Senior Manager, Strategen
- Jim Barbour: Senior Sales Executive- Utilities, Enchanted Rock LLC
- Jonathan Kevles: Director, Project Origination, Concentric Power
- Joyce Steingass: Utilities Engineer, Energy Division, CPUC
- Les Guliasi: President, Power Association of Northern California
- Michael Puckett: Business Development Manager, Nextera Energy
- Nikole Rajnovich: Senior Originator, Distributed Generation, NextEra Energy
- Patsy Dugger: Director, Alternative Energy Systems Consulting (AESC inc.)
- Sascha Von Meir: Director of the California Institute for Energy and the Environment's Electric Grid Program Area
- Thomas McAndrew: Founding Partner and CEO, Enchanted Rock LLC
- Venkat Venkataraman: CTO & EVP of Engineering, Bloom Energy
- Val Decker: Senior Engineering Manager, Concentric Power
- Treva Reid: Senior Public Affairs Representative, Local Public Affairs for East Bay

Agenda:

	Item	Lead	Time
1	Safety and Intros	PG&E	5 minutes
2	Today's Agenda &	C 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5 minutes
	Objectives	C Space	
	About CMEP and		
3	where we need your	PG&E	15 minutes
	help		
4	Framework and ground	C Space	5 minutes
	rules for workshop	Сэрасс	3 minutes
5	Program eligibility	PG&E/C Space	15 minutes
6	Enhanced Technical	PG&E/C Space	15 minutes
	Support		13 minutes
7	Application Process	PG&E/C Space	15 minutes
8	Cost Offset Design	PG&E/C Space	15 minutes
9	Open Feedback	PG&E	5 minutes
10	Wrap up & next steps	PG&E	5 minutes

Desired Meeting Outcomes:

- Gather communities' thoughts and suggestions regarding the CMEP to help guide final program design.
- Ensure communities know how to provide additional feedback to PG&E after today's discussion.

Questions:

- Will community support be considered at a micro-community level throughout prioritization? Is anything that supports the community considered, or are there additional factors?
- How is PG&E defining "community"? In other words, what groups are eligible for this program?
- Does PG&E have a vision for how generation, grid infrastructure, operation/coordination, software, etc. will unfold at this point?
- Is the microgrid limited to locations like hospitals, police, fire stations, gas stations, supermarkets? Or does it allow other businesses to utilize these resources?
- What is the linkage between collecting funding versus applying and participating in the program? A lot of communities are at the idea stage, working on budgets and funding.
- How is PG&E quantifying customers? If there's a fire department and police department, that's one entity on two meters. Is that more than one customer, or is that one customer?
- How would communities get this funding? Is PG&E deciding who gets funding and who doesn't?
- What is the process through which PG&E selects communities for funding?
- What is the right minimum percentage of renewable energy? Where is the "line", and how do you determine who is above/below the line?
- What does it mean to have 'funding in place' for the project? How is PG&E defining this?
- What will distribution upgrades cost? How much of this cost will be on the community?
- What is the desired level of development of a microgrid design prior to the application process?
- Who would own the microgrids? Are there restrictions on ownership?
- What entities will be deemed qualified applicants?
- What elements of the project will be covered by the cost offset?

Summarized Notes:

PG&E provided an overview of the Community Microgrid Enablement Program's objectives, status, and implementation timeframes.

PG&E provided an overview on what a community microgrid is and what it would be designed to serve.

PG&E introduced areas where they need additional assistance [Program Eligibility, Application Process, Enhanced Technical Support, Cost Offset Design, and Project Prioritization].

C Space provided overview framework for the session.

Program Eligibility:

PG&E provided an overview of existing program eligibility.

Session participants weighed in on eligibility requirements for a minimum percentage of renewable energy and whether projects should be limited to those needed to address near-term fire season priorities.

Session participants emphasized that in addition to environmental carbon-related policy considerations, from a resiliency perspective, diesel generators are an exposure to fuel delivery risk. The majority of session participants were in favor of at least some minimum renewable energy requirement based on the SB 1339 microgrid requirements.

Additionally, session participants were receptive to a focus on near-term fire season priorities.

Enhanced Technical Support

PG&E provided an overview of the approved framework to manage pre-application consulting services and intake of qualifying* local and tribal government resiliency projects.

Session participants weighed in on prioritization of project management resources for PG&E specific tasks [Establishing an end-to-end project management process for community-driven resiliency projects, Staffing Project Managers to provide consistent support throughout the project lifecycle, Providing support in navigating relevant PG&E processes (e.g. interconnection)].

Session participants emphasized the need for transparency from PG&E in terms of access to information about the distribution within a microgrid to allow for feasibility studies. Additionally, session participants expressed the need for PG&E to help in fast-tracking interconnection and for quick turnaround on technical questions to help communities plan and identify feasibility.

Session participants expressed a desire for clear steps and milestones for project execution along with a direct contact at PG&E to provide reassurance that money and time are being spent in the most productive way possible. Additionally, they expressed a desire for a local point-person from PG&E to provide expertise and information.

Session participants weighed in on prioritization of project evaluation and technical support [Helping local and tribal governments understand resilience options, Analyzing future PSPS exposure and identifying potential in-flight or planned PSPS mitigations, If a microgrid, identifying key project design considerations, Determine to what extent the project may qualify for CMEP cost offsets].

Session participants flagged that identifying in-flight or planned PSPS mitigations would help project developers to develop project pipelines and use PG&E data to determine what potential areas are most exposed to PSPS events to plan on developing projects in those areas. Additionally, they flagged a desire for PG&E assistance in analyzing future PSPS mitigations, planned distribution upgrades, and interconnection processes for specific communities.

Session participants weighed in on prioritization of enhanced tools [PG&E provides a tool for city engineers and consultants to design their own microgrids, PG&E provides information on where a microgrid would be less costly (e.g. existing storage/gen resources + minimal grid updates and more available capacity)].

Session participants flagged that they currently cover local outreach, project evaluation, and technical support – their needs from PG&E center around greater transparency surrounding the interconnection process, locations of PG&E facilities, and information on upgrades in surrounding areas.

Application Process:

PG&E provided an overview of issues or concerns that may be important to attendees during the application process.

Session participants weighed in on how PG&E should ensure that qualified, serious applicants are not held up applicants who simply want to "hold their space in the queue", evaluating three different approaches for the application process [Keep Things Simple, Minimal Financial Threshold and some Project Framing, Minimal Design Concept already Developed].

Session participants flagged that communities may serve as their own gatekeepers when it comes to getting to a point where they are ready to move forward and seek assistance from PG&E. Additionally, participants expressed a desire to understand the desired level of development of design concepts within applications.

Session participants weighed in on approaches to ensure an equitable program application process, with options for an Annual or Twice-Yearly Application Window, First Come First Serve, or Allocation of Resources across Counties.

Session participants were receptive to a first come, first serve application process to gauge the level of interest in the program and allow prepared applicants to move efficiently through the process while providing high-visibility learning opportunities for future grids. Additionally, participants expressed concerns with resiliency associated with the annual or twice-yearly application window, which could cut communities out of 6+ months of microgrid capabilities during PSPS events. They recommended an adjustment to a quarterly application window if this approach was selected.

Cost Offset Design

PG&E introduced commission approval to offset some portion of the microgrid development costs normally charged to customers, including costs associated with isolation devices, microgrid controllers, and fault protection devices and hardening.

Session participants weighed in on what percentage of eligible costs should be offset [Go Big vs. Brace for Initial Demand].

Session participants emphasized the need to get viable projects over the finish line within the first few years to provide learning opportunities for future projects and identify variability in costs associated with the project and necessary upgrades. Additionally, they recommended the prioritization of pre-existing resources for implementation.

Closing Discussion

PG&E closed the discussion with questions on key barriers to developing microgrids in communities and elements that would be most helpful for PG&E to enable microgrids and resilience.

Session participants flagged that key barriers to microgrids center around community access to information regarding the distribution system, generation resources, and infrastructure needed to deploy the microgrid.

Additionally, session participants recommended partnership with developers to deliver resources and solutions to disadvantaged communities.

Wrap Up and Next Steps

PG&E provided next steps for the drafting of final program details and submission to the CPUC in Mid-August and informed participants on how to submit additional feedback to be incorporated into the final program details and submission.

PG&E thanked participants for their input.

The meeting adjourned.

Appendix 3

Meetings on Prioritization of DAC and Vulnerable Communities

Summary of CMEP Meetings on Prioritization of DAC and Vulnerable Communities					
Entity(ies)	External Participants Name(s)	PG&E Participant(s)	Date	Form of Communication	Topic (Succinct)
California Environmental Justice Alliance		Grady Mathai-Jackson	6/25/20 and 6/26/20	E-mail	DAC and AFN Outreach
California Environmental Justice Alliance and Communities for a Better Environment	Tyler Earl, CBE	Jan Berman, Jeremy Donnell, Eunice Garcia, Molly Hoyt, Grady Mathai-Jackson	7/2/2020	Conference call	DAC and AFN Outreach
GRID Alternatives	Stan Greschner, Elise Hunter	Marlene Murphy-Roach, Eunice Garcia, Igor Grinberg, Molly Hoyt	7/6/2020	Conference call	How to prioritize and support DACs and vulnerable communities
Disadvantaged Communities Advisory Group	DACAG members and general public	Eunice Garcia, Molly Hoyt	7/17/2020	Conference call	How to prioritize and support DACs and vulnerable communities
Asian Pacific Environmental Network	Amee Raval	Eunice Garcia, Molly Hoyt	7/27/2020	Conference call	Community microgrids for DACs and vulnerable communities

Appendix 4

Pro Forma Community Microgrid Enablement Tariff

PRO FORMA COMMUNITY MICROGRID ENABLEMENT TARIFF ELECTRIC SCHEDULE E-CMET

A. APPLICABILITY:

The Community Microgrid Enablement Tariff (CMET) schedule (Schedule CMET or this Schedule) implements, in part, the Community Microgrid Enablement Program (CMEP) pursuant to Public Utilities Commission (CPUC) Decision (D.) D.20-06-017. This CMET governs the eligibility, engineering studies, development, and island and transitional operation of Community Microgrids, as defined herein, under the CMEP. As an experimental tariff associated with a limited CMEP, this Schedule is available, on a first-come, first-served basis, to applicants (CMET Applicants) who (i) meet the CMET Eligibility Criteria in Section C, and (ii) submit a complete CMET Application (Application). This Schedule will close to CMET Applicants on the date set forth in Section D, below. Capitalized terms specific to this tariff are defined in section N below.

B. TERRITORY:

This schedule applies throughout PG&E's electric service area.

C. CMET ELIGIBILITY CRITERIA:

A CMET Applicant must meet all of the eligibility criteria outlined below (CMET Eligibility Criteria):

- 1. Community Microgrid: The CMET Project, consistent with the framework for the CMEP approved in CPUC D.20-06-017, must meet the needs of at least one Critical Facility and at least one additional customer within the Microgrid Boundary.
- 2. Location: The CMET project must be located either in a Tier 2 or Tier 3 High Fire Threat District (HFTD), in an area that has been impacted by a Public Safety Power Shutoff (PSPS) event in the past, or is in an Outage Prone Area. CMET Projects located in areas that have been excluded from all reasonably anticipated potential future PSPS events due to other PSPS mitigation activities will not be eligible, regardless of whether they have previously experienced a PSPS event.
- 3. Community Microgrid Parameters: The CMET Project must include interconnected exporting energy producing resources (Project Resources) that do not exceed 20MW in aggregate within a clearly defined Microgrid in PG&E's Distribution System with a single Microgrid Islanding Point; the CMET Project must act as a single, controllable entity; the CMET Project must be able to connect to, disconnect from, and run in parallel with larger portions of the electrical grid; and the CMET Project must be capable of maintaining electrical supply and service quality when isolated to connected customers during larger grid disturbances. Project Resources must be interconnected to PG&E's Distribution System pursuant to PG&E's Wholesale Distribution Tariff (WDT) and/or Electric Rule 21 as applicable.
- 4. Community Interest: The CMET Applicant must provide to PG&E a written letter from i) any local government or Tribe, as applicable, with jurisdiction over the area within the proposed Microgrid Boundary, or ii) Community Choice Aggregator that provides service within the

- proposed Microgrid Boundary to document an expression of interest in the CMET Project as part of the Application.
- Pre-Application Report: The CMET Applicant must complete a Community Microgrid Pre-Application Report (CM Pre-Application Report) and consultation with PG&E prior to submitting a CMET Application.
- 6. Applicant Experience: The CMET Applicant must provide to PG&E an attestation that at least one current member of its development team has: (a) completed the development of at least one microgrid project of similar technology and capacity; or (b) begun construction of at least one other project of similar technology and capacity. The CMET Applicant must identify the entity(ies), if not the Applicant, that will be responsible for development of the CMET Project and the entity that will be the CMET Aggregator responsible for coordinated operation with PG&E pursuant to Rule 24 and an executed CMET Microgrid Operating Agreement ("CMET MOA" or "MOA").

D. CMET PERIOD:

CMET Availability Period: The CMET shall begin on the Effective Date and shall continue thereafter until the close on December 31, 2022. At the close of the CMET, this Schedule will close to new Applications and no new CMET MOAs will be offered by PG&E. Applications submitted prior to the close will continue to be processed under this Schedule. Any MOA executed under this Schedule will continue in effect pursuant to the terms of the agreement.

E. INTERCONNECTION STUDIES

- 1. Each Project Resource is required to be interconnected to PG&E's Distribution System under PG&E's WDT or Electric Rule 21, according to the applicability of each of those tariffs.
- 2. Interconnection Study: A CMET Project will require a separate application for Interconnection Study of a CMET Project's proposed Project Resources pursuant to PG&E's WDT or Electric Rule 21, as applicable for each of the Generating Facilities participating as a Project Resource.
- Interconnection Agreement: The Interconnection Study will identify any required
 Interconnection Facilities, Distribution Upgrades, or Network Upgrades consistent with PG&E's
 WDT and Electric Rule 21, as applicable. The CMET Project is required to execute an
 Interconnection Agreement for each Project Resource.
- 4. A CMET Applicant will have up to 30 calendar days to review the Interconnection Study. The CMET Applicant, after review, will notify PG&E in writing within 5 calendar days its agreement to proceed with a Microgrid Islanding Study and pay any additional fees for this study, or its withdrawal of the Application. If the CMET Applicant fails to notify PG&E in writing within 5 calendar days after review of the Interconnection Study, the Application for the purpose of CMET Project development will be deemed withdrawn.
- 5. Applicant may continue with the interconnection of resources under PG&E's WDT or Rule 21 independent of a withdrawn CMET Application.

F. MICROGRID ISLANDING STUDY

1. Once it has received an agreement with the Applicant to do so, PG&E will conduct a Microgrid Islanding Study to determine i) the engineering and operational viability of the proposed CMET Project's Microgrid Boundary, ii) protection requirements to ensure faults within the microgrid can be detected when in Island Mode, iii) controls requirements to ensure power quality is maintained when in Island Mode, iv) telemetry and cybersecurity requirements, iv) and the required electrical system upgrades (Special Facilities) to establish the CMET Project Microgrid Boundary and microgrid operational controls, and v) the non-binding preliminary estimated costs and scheduled completion date for such Special Facilities, that will be required to enable the CMET Project. This Microgrid Islanding Study will include a description of operations for the CMET Project that includes a logical architecture for the associated protection, controls, communications, cybersecurity and other system components. One outcome of the Microgrid Facilities Study will be to produce a required CMET Project Special Facilities Agreement, pursuant to Electric Rule 2. Customer owned microgrid controllers and protective relays must be validated by PG&E for the interoperability with PG&E's electric distribution system. PG&E will publish a list of approved equipment and establish open and objective criteria for vendors to seek acceptance by PG&E.

2. CMET Applicant Review

- a. CMET Applicant will have up to 30 calendar days to review the Microgrid Islanding Study and sign the Special Facilities Agreement (Project SFA) and agree in writing to enter into a Microgrid Operating Agreement.
- b. If an Applicant agrees to proceed, the CMET Project will be included in the Allocated Capacity calculation under the applicable Interconnection Study.
- c. If, after review, the CMET Applicant declines to proceed with the CMET Project, the CMET Applicant will notify PG&E in writing within 5 calendar days and the Application will be deemed withdrawn.

G. COMMUNITY MICROGRID DEVELOPMENT AND OPERATION

CMET Project development and operation will be governed by the MOA. A CMET Project's use of PG&E's Distribution System to form a Community Microgrid requires operational coordination for public safety and overall Distribution System operation.

- 1. Roles and Responsibilities.
 - a. Distribution Provider. PG&E as utility distribution owner and operator is responsible for Distribution Service under both Blue Sky and Island Modes including the sole determination of Emergency Events.
 - b. Distribution Service. PG&E will provide Distribution Service for the customers and resources within the CMET Project during Blue Sky and Island Modes pursuant to all applicable rules on file with the CPUC.
 - c. Community Microgrid Aggregator (CMG Aggregator). A third-party aggregator that coordinates control of distributed resources, including Project Resources and any demand side management resources, consistent with relevant provisions of Electric Rule 2, PG&E's WDT, and Electric Rule 21 including frequency and voltage and other power quality

requirements within PG&E established control parameters to enable the CMET Project to operate in Island Mode.

- 2. Microgrid Operating Agreement. An MOA between the CMG Aggregator and PG&E will govern CMET Project development testing and commercial operations. The MOA will include operational coordination requirements applicable to the unique characteristics of the CMET Project and general requirements consistent with relevant provisions of Electric Rule 2, Electric Rule 21, PG&E's WDT and associated interconnection agreements, Project SFA and operating protocols of the Distribution Provider to ensure operational coordination for public safety and overall system operation. The MOA is dependent upon execution of any required Interconnection Agreements and Special Facilities Agreements.
 - a. Applicant and PG&E will execute a mutually agreeable MOA within 90 days of execution of the later of any applicable Interconnection or Special Facilities Agreements.
 - b. If the CMET Aggregator and PG&E fail to execute a MOA within the specific time period, the Application will be considered rejected.
- 3. Material Modification. A Material Modification will require re-study of the changes in a new Microgrid Islanding Study.
- 4. PG&E reserves the right to suspend CMET Project operation, change the Microgrid Islanding Point, or other Distribution System changes required to meet its service obligations pursuant to all applicable rules on file with the CPUC.

H. CMET SERVICES AND FEES:

- PG&E Services provided under this tariff will be provided pursuant to PG&E's WDT or Electric Rule 21 as applicable, and other applicable tariffs or rules, as may be amended from time to time.
- 2. CMET Applicant is responsible for all applicable interconnection study fees and, subject to Section E.3, any required distributed resource interconnection distribution upgrades and service upgrades pursuant to applicable rules including NEM or D.02-03-057 as may pertain to individual Project Resources.
- **3.** CMET Applicant is responsible for the Microgrid Pre-Application Study, Microgrid Islanding Study fees and subsequent Special Facilities costs pursuant to Electric Rule 2. Such study fees and special facilities costs may be eligible for credits to offset any applicable costs to Applicant pursuant to the CMEP.

I. PG&E TARIFFS, PROGRAMS and SERVICE AGREEMENTS

- 1. PG&E Tariffs During Island and Blue Sky Modes. Billing for PG&E Bundled Customers will continue to occur under their applicable PG&E tariff provisions and rules.
- 2. Participation in PG&E Programs. Project Resources are eligible to provide distribution services and/or participate in demand side management programs during Blue Sky Mode consistent with applicable PG&E tariffs, programs or procurements. However, participation in PG&E programs shall not impede the ability to enable Island Mode, as determined by the Distribution provider,

- Island Mode, at any time during which this tariff applies to the CMET Project or the CMET MOA for the CMET Project is in effect.
- 3. Services Agreements. An existing power purchase agreement or other contract for energy, capacity or distribution services to PG&E, or any other counterparty, is prohibited for a CMET Project, if such PPA or other contract impedes the ability to enable Island Mode, as determined by Distribution Provider, at any time during which this tariff applies to the CMET Project or the CMET MOA for the CMET Project is in effect.

J. CAISO MARKET PARTICIPATION

Participation in CAISO Market: Project Resources are eligible to participate in the CAISO markets
consistent with applicable tariffs and the governing Interconnection Agreement for each
Generating Facility during Blue Sky Mode. During Island Mode, the settlement of energy
transactions associated the Project Resources will continue to occur according to applicable
CAISO tariff provisions and rules, as further described in the CMET MOA.

K. METERING

CMET Project metering requirements are defined in the applicable PG&E Electric Rules including, but not limited to, 2, 15, 16, 17, 18, 21, and PG&E's WDT.

L. TERMINATION

- 1. Applicant Termination:
 - a. Applicant may terminate the application process, including Microgrid Islanding Study, for any reason with 30 days written notice. Applicant will be responsible for any PG&E costs incurred through termination date.
 - b. CMET Project development or operation may be terminated pursuant to the terms of the MOA.
- 2. PG&E Termination: PG&E may terminate a CMET Project pursuant to the terms of the MOA.

M. CMET SPECIAL CONDITIONS

The following Special Conditions apply to PG&E's CMET:

CMET Suspension: Because this is an experimental tariff, PG&E may file a Tier 2 Advice Letter
(AL) with the CPUC to suspend service under this Schedule. The AL will be served on the
applicable CPUC service list and will be served on CMET Aggregators, CMET Applicants and any
CMET Customers. The AL shall identify the portion of the CMET suspended, the reasons for the
suspension, and PG&E's proposal for resolving the issue.

N. CMET DEFINITIONS

Capitalized terms in this Schedule have the meaning as defined in this Section.

1. Affected System. An electric system other than the Distribution Provider's Distribution System that may be affected by a Material Modification.

- 2. Blue Sky Mode. The normal mode of operation when the Community Microgrid is Interconnected to and operating in parallel with the Distribution System, is not operating in Island Mode, and PG&E maintains operational coordination of the delivery of electric service.
- 3. CMET Applicant. The person or entity who submits an Application for a CMET Project to PG&E to apply to participate on this Schedule.
- 4. CMET Customer. A customer receiving PG&E distribution service within the CMET Project Microgrid Boundary.
- 5. CMET Project. Facilities and equipment needed to create and operate a Community Microgrid, including the generation, breakers, protective and associated equipment, improvements, and other tangible assets, contract rights, easements, rights of way, licenses and other interests or rights in real estate reasonably necessary for the construction, operation, and maintenance of the Community Microgrid subject to this CMET.
- 6. Community Microgrid. For the purposes of this Schedule, a Community Microgrid is defined as a microgrid with distribution system connected Project Resources that supply energy to at least one Critical Facility and at least one other customer within a Microgrid Boundary capable of Island Mode.
- 7. Community Microgrid Aggregator (CMG Aggregator). The entity that is providing microgrid forming service to PG&E under an executed CMET MOA pursuant to Rule 24.
- 8. Community Microgrid Enablement Program (CMEP). PG&E program to enable community-proposed microgrids that provide enhanced resilience for critical facilities and vulnerable customer groups pursuant to D.20-06-017.
- 9. Critical Facility. A facility that provides critical services to the surrounding community pursuant to the definition of Critical Facilities in D.19-05-042, aligned with Department of Homeland Security's Critical Infrastructure Sectors, as may be amended by the CPUC.
- 10. Distribution Provider. PG&E, which owns, controls, or operates facilities used for the delivery of electric energy and provides Distribution Service under this CMET.
- 11. Distribution Service. The transporting of electric power over and through various PG&E facilities for delivery to a Distribution Customer. The Distribution Service provided under this CMET is the distribution of capacity and energy from the Point(s) of Receipt to the Point(s) of Delivery under this CMET.
- 12. Distribution System. PG&E's distribution system broadly consists of the stepdown substations, the primary distribution circuits, and the secondary distribution system. The secondary distribution system consists of the line transformers that step the primary voltage down to a secondary voltage, and the secondary conductors. The provisions of this CMET applies to service on this Distribution System.
- 13. Effective Date. The date upon which any CPUC disposition of the CMEP Advice Letter makes that Advice Letter effective.
- 14. Emergency Events. As determined by PG&E in its reasonable discretion, a condition or situation requiring prompt action by PG&E (a) to maintain the reliable operation of the Distribution System; (b) to prevent or limit the loss of load or generation; (c) to maintain public safety or the safety of PG&E's personnel; (d) to protect PG&E, Customer, or third-party property; or as a

- Scheduled Island Mode Operation as a preventative action ahead of impending weather events or natural disasters or in response to other unusual conditions.
- 15. Generating Facility. All generators, electrical wires, equipment, and other facilities, excluding Interconnection Facilities, owned or provided by Producer for the purpose of producing electric power, including storage.
- 16. High Fire Threat District. An area where there is an elevated risk for power line fires igniting and spreading rapidly as identified in the CPUC Fire-Threat Map, as may be amended.
- 17. Interconnection Study. A study to establish the requirements for Interconnection of a Generating Facility with Distribution Provider's Distribution System or Transmission System, pursuant to WDT or Rule 21, as applicable.
- 18. Island Mode. A mode of operation when a Microgrid that normally operates in Grid-Connected Mode is disconnected from the Distribution System at MIP, and the Microgrid is generating or producing energy to provide electric service within the Microgrid under the operational coordination of the CMET Aggregator.
- 19. Material Modification is a change in Project Resources, non-Project Resources, or customer loads within the Microgrid Boundary, or other Affected Systems outside the Microgrid Boundary that has a material impact on the ability of a CMET Project to function in Island Mode.
- 20. Microgrid. An 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.
- 21. Microgrid Boundary. An electrically contiguous area beyond a Microgrid Islanding Point on the Distribution System that defines a microgrid as a single controllable entity.
- 22. Microgrid Islanding Point (MIP). The point on PG&E's distribution System that establishes the microgrid interface consistent with applicable standards including IEEE 1547-2018 and IEEE 519.
- 23. Microgrid Island Study. An engineering study conducted by the Distribution Provider to determine the required modifications to the Distribution Provider's Distribution Facilities, including the cost and scheduled completion date for such modifications, that will be required to provide the requested Microgrid Boundary and island operation capable of maintaining voltage, frequency and power quality within PG&E control parameters in accordance with Rule 2.
- 24. Microgrid Operating Agreement. An agreement between the PG&E and CMG Aggregator that governs CMET Project development and testing, and commercial operations to ensure safety and service quality in compliance with applicable rules.
- 25. Microgrid Pre-Application Study. A preliminary study of a proposed Community Microgrid and consultation for the purpose of enabling an Applicant to develop an effective CMET Application.
- 26. Outage Prone Area. Areas served by the top 1% Worst Performing Circuits excluding Major Event Days as shown in PG&E's Annual Electric Reliability Report, in either the AIDI or AIFI category, in either of the last 2 years.

- 27. PG&E Bundled Customer. A customer receiving full retail electric service from PG&E under an applicable retail tariff.
- 28. Project Special Facilities Agreement (Project SFA). A Special Facilities Agreement for the CMET Project Service Facilities upgrades necessary to enable Blue Sky and Island Mode operations.
- 29. Project Resource. Electric generation and storage technology used to form a microgrid that are interconnected to the Distribution System pursuant to PG&E's WDT or Electric Rule 21 within the Community Microgrid Project Microgrid Boundary that complies 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.
- 30. Scheduled Island Mode Operation. A Microgrid operating in Island Mode that is scheduled and coordinated between the CMG Aggregator and PG&E.
- 31. Service Facilities. PG&E's Service Facilities shall consist of (a) primary or secondary underground or overhead service conductors, (b) poles to support overhead service conductors, (c) service transformers, (d) PG&E-owned metering equipment, and (e) other PG&E-owned service-related equipment that extend from PG&E's Distribution Facilities to the Customer's Service Delivery Point as defined in PG&E's Electric Rule 16.
- 32. Special Facilities Agreement. Special facilities will be installed under the terms and conditions of a contract in the form on file with the Commission, pursuant to Electric Rule 2.
- 33. Unscheduled Island Mode Operation. A Microgrid operating in Island Mode that is not scheduled or coordinated between the CMG Aggregator and PG&E in response to an unplanned event on the Distribution System.

Appendix 5

Critical Facilities Definition

APPENDIX 5: List of Critical Facilities and Critical Infrastructure

For purposes of the CMEP, PG&E adopts the definition of critical facilities put forth in D.19-05-042¹, as aligned with Department of Homeland Security's Critical Infrastructure Sectors²:

- Emergency Services Sector
 - Police Stations
 - Fire Stations
 - Emergency Operations Centers
- Government Facilities Sector
 - Schools
 - Jails and prisons
- Healthcare and Public Health Sector
 - Public Health Departments
 - Medical facilities, including hospitals, skilled nursing facilities, nursing homes, blood banks, health care facilities, dialysis centers and hospice facilities³
- Energy Sector
 - Public and private utility facilities vital to maintaining or restoring normal service, including, but not limited to, interconnected publicly-owned utilities and electric cooperatives
- Water and Wastewater Systems Sector
 - Facilities associated with the provision of drinking water or processing of wastewater including facilities used to pump, divert, transport, store, treat and deliver water or wastewater
- Communications Sector
 - Communication carrier infrastructure including selective routers, central offices, head ends, cellular switches, remote terminals and cellular sites
- Chemical Sector
 - o Facilities associated with the provision of manufacturing, maintaining, or distributing hazardous materials and chemicals.

¹ Appendix A, p. A4-A5

² https://www.dhs.gov/cisa/critical-infrastructure-sectors at 21.

³ Excluding doctor offices and other non-essential medical facilities

Appendix 6

Answers to Questions on p.86 of D.20-06-017

APPENDIX 6: ANSWERS TO CMEP QUESTIONS

POSED IN DECISION D.20-06-017 (p.86-87)

- 1. Should CMEP apply to both behind-the-meter (BTM) and in-front-of-the-meter (IFM) projects? Does CMEP apply to remote grids?
 - A. As described in the attached advice letter, different aspects of the program will apply to different types of resiliency projects, including behind-the-meter and in-front-of-the-meter projects. CMEP does not, however, apply to remote grids. PG&E's Remote Grid Initiative will validate and develop Remote Grid solutions so that they can be considered alongside of or in lieu of other service arrangements and/or wildfire risk mitigation activities such as system hardening. As a utility-driven initiative with this purpose, it is not applicable to CMEP.
- 2. Should CMEP apply if a local and tribal government promotes a project that uses private sector assets?
 - A. PG&E imposes no restriction on the use of private sector assets used as Project Resources in a microgrid. However, as distribution provider, PG&E maintains ownership, control, and operational responsibility for Distribution Service under the Community Microgrid Enablement Tariff.
- 3. Should technical support and matching funds be made available on a first-come, first-served basis based on specific eligibility criteria?
 - A. PG&E describes in the attached advice letter its strategies for prioritizing technical support and cost offsets for Disadvantaged and Vulnerable Communities, as well as for projects that are most urgent for public health, safety, and public interest. These strategies include prioritized technical support, as well as a carve-out of cost offset funds for the use of Disadvantaged and Vulnerable Communities, as defined. Aside from these prioritization strategies, PG&E will make its technical support and cost offsets available on a first-come, first-served basis. In all cases, specific eligibility criteria as outlined in the attached advice letter will have to be met.
- 4. If requests exceed funding, should there be criteria for which applicants will be served?
 - A. Yes, please see answer to question 3, and the Prioritization section of the attached advice letter.
- 5. Should there be any limitation to types of projects that can be included?
 - A. Yes, please see the Eligibility section of the attached advice letter.
- 6. Should projects be limited to certain kinds of resiliency projects, microgrids, and technologies using renewable distributed energy resources or fuels?

¹ As defined in the Community Microgrid Enablement Tariff

- A. Among the factors upon which PG&E will prioritize projects for technical support and cost offsets are those projects with higher levels of renewable energy. For a full description of eligibility and prioritization criteria, please see those sections of the attached advice letter.
- 7. Should projects be prioritized based on feasibility to get online in time for 2020 fire season?
 - A. PG&E anticipates that most of the microgrid projects seeking technical support and cost offsets will require more planning and engineering than can be completed by the 2020 fire season. However, the initial intake and vetting stage of the CMEP process may be able to assist some projects in answering questions and completing requirements in time for the 2020 fire season. As described in the attached advice letter, PG&E will prioritize projects that are most urgent for public health, safety, and the public interest.
- 8. Should projects be limited to those needed to address near-term fire season priorities and in sites based on fire prevention within HFTDs?
 - A. Projects should not be limited to those needed to address near-term fire season priorities. The time periods required for project planning, engineering, and agreements dictate that we take a longer view in regard to program eligibility. However, as described in the attached advice letter, PG&E will prioritize projects that are most urgent for public health, safety, and the public interest.
 - Additionally, projects should not be limited to those sites based on fire prevention within HFTDs. D.20-06-017 directed that PG&E expand program eligibility to all areas prone to all outage events, not just Tier 2 and 3 HFTDs. ² In compliance with that directive, PG&E expanded eligibility to include areas previously impacted by PSPS events, Tier 2 and 3 HFTDs, and areas prone to outages, defined as the top 1% Worst Performing Circuits excluding Major Event Days as shown in PG&E's Annual Electric Reliability Report, in either the Average Interruption Duration Index (AIDI) or Average Interruption Frequency Index (AIFI) category, in either of the last 2 years.
- 9. Should eligibility be expanded to include areas that experienced one or more PSPS events and are prone to outage events due to PSPS although they may be located outside of Tier 2 and Tier 3 HFTDs?
 - A. Yes. See second part of answer #8.
- 10. Applicability for Matching Funds: How should the level of matching funds dedicated to the CMEP Program be determined? Can matching funds be used for any project costs or should matching funds be restricted to funding distribution system upgrades including a cap or threshold?
 - A. PG&E determined the level of matching funds by engagement with stakeholders in a series of meet and confer workshops. PG&E will pay for 100% of eligible costs to upgrade its distribution system to enable the islanding function of the microgrid or to ensure its safe operation. PG&E will institute a cap of \$3M per project to ensure equitable access to funds.

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² D.20-06-017, p.85.

PG&E Gas and Electric Advice Submittal List General Order 96-B, Section IV

AT&T

Albion Power Company Alcantar & Kahl LLP

Alta Power Group, LLC Anderson & Poole

Atlas ReFuel BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission
California Public Utilities Commission
California State Association of Counties
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Cenergy Power
Center for Biological Diversity

Chevron Pipeline and Power City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services Don Pickett & Associates, Inc. Douglass & Liddell Downey & Brand
East Bay Community Energy
Ellison Schneider & Harris LLP
Energy Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz &
Ritchie
Green Power Institute
Hanna & Morton

IGS Energy

ICF

International Power Technology Intestate Gas Services, Inc.

Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated

Waste Management Task Force MRW & Associates Manatt Phelps Phillips Marin Energy Authority McKenzie & Associates

Modesto Irrigation District NLine Energy, Inc. NRG Solar

Office of Ratepayer Advocates OnGrid Solar Pacific Gas and Electric Company Peninsula Clean Energy Pioneer Community Energy

Redwood Coast Energy Authority Regulatory & Cogeneration Service, Inc. SCD Energy Solutions

SCE

SDG&E and SoCalGas

Tiger Natural Gas, Inc.

SPURR

San Francisco Water Power and Sewer Seattle City Light Sempra Utilities Southern California Edison Company Southern California Gas Company Spark Energy Sun Light & Power Sunshine Design Tecogen, Inc. TerraVerde Renewable Partners

TransCanada
Troutman Sanders LLP
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead
Electric Company
Western Manufactured Housing
Communities Association (WMA)
Yep Energy