

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

**RESOLUTION E-5132
March 18, 2021**

R E S O L U T I O N

Resolution E-5132. Pacific Gas and Electric. Approval of Remote Grid Standalone Power System Supplemental Provision Agreement.

PROPOSED OUTCOME:

- Approves with modification Pacific Gas and Electric's (PG&E) Advice Letter 6017-E.

SAFETY CONSIDERATIONS:

- Remote grids represent a rapid and cost-effective method for reducing wildfire risk, and thus improving the safety of the distribution system.

ESTIMATED COST:

- There are no additional costs associated with this resolution. Remote grids represent a lower cost alternative to grid hardening already being pursued through PG&E's Wildfire Mitigation Plan or grid maintenance and construction already part of PG&E's standard operations.

By Advice Letter 6017-E, Filed on 12-15-2020.

SUMMARY

This Resolution approves with modification Pacific Gas and Electric (PG&E) Advice Letter (AL) 6017-E. It is reasonable for the Commission to grant PG&E a tariff deviation to define the roles, responsibilities and terms associated with customers taking service from Remote Grids up to a two megawatt total cap, which we anticipate will reduce distribution grid rebuilding and maintenance costs versus traditional infrastructure construction and operations. Remote Grids are made up of a Standalone Power System and associated infrastructure that

provide utility-level service to remote customers without connecting to the larger electric system. In some cases, PG&E can likely avoid substantial wildfire mitigation and distribution infrastructure costs and effectively mitigate wildfire risk by deploying Remote Grids, benefiting all distribution customers. The Commission grants PG&E's request for a tariff deviation for its Standalone Power System Supplemental Provisions Agreement, attached in its Advice Letter, up to a total two megawatt cap so that PG&E can best implement existing state law, Commission orders and take advantage of the opportunities offered for ratepayer savings, increased reliability and reduced fire risk by Remote Grids. We approve PG&E's proposal, including a tariff deviation authorizing use of the Supplemental Provisions Agreement only for an initial set of Remote Grids up to two megawatts of historical measured peak customer load. The CPUC anticipates the experience gained here will help inform further microgrid development in furtherance of several Commission priorities as discussed herein. The actions taken in this Resolution are consistent with the vision adopted in the CPUC's 2016 Distributed Energy Resources Action Plan, specifically the Commission's interest in unleashing ratepayer benefit through the strategic use of distributed energy resource investments.

BACKGROUND

On December 15, 2020, Pacific Gas and Electric (PG&E) filed AL 6017-E to seek approval for a Supplemental Provisions Agreement that clarifies PG&E's customer service tariffs for customers served by Remote Grids. The Advice Letter was not directed by statute or previous Commission order but reflects goals consistent with multiple Commission proceedings and orders. PG&E's Remote Grid Initiative has been specifically discussed in both the Wildfire Mitigation Plan proceeding (Rulemaking [R.] 18-10-007) and the Resiliency and Microgrids proceeding, R.19-09-009.

PG&E's Previous Discussion of Remote Grid Initiative in Other Procedural Forums

PG&E's Remote Grid Initiative is included in its current Wildfire Mitigation Plan, under section 5.1.D.3.8:

Remote Grid is a new utility service concept using decentralized energy sources for permanent energy supply to remote customers as

an alternative to energy supply through hardened traditional utility infrastructure. Throughout PG&E's service territory, there are pockets of isolated small customer loads that are currently served via long electric distribution feeders, or until recently have been served by such feeders (but are now disconnected due to damage from recent wildfires). In many circumstances, these feeders traverse through [High Fire Threat Districts (HFTD)] areas. If these long feeders were removed and the customers served from a local and decentralized energy source, the resulting reduction in overhead lines could reduce fire ignition risk as an alternative to or in conjunction with system hardening. In addition to reducing wildfire risk, Remote Grid could be a cost-effective solution against expense and capital costs for the rebuild of fire-damaged infrastructure or for HFTD hardening infrastructure jobs to meet new HFTD build standards.

PG&E's Remote Grid Initiative will validate and develop Remote Grid solutions as standard offerings such that they can be considered alongside or in lieu of other service arrangements and/or wildfire risk mitigation activities such as system hardening. In 2020, PG&E plans to deploy at least 4-8 initial sites to validate use cases, design standards, deployment processes and commercial arrangements. Based on the results of the initial projects, PG&E will deliver recommendations for scale up and/or further development for consideration in 2021 and beyond.¹

PG&E also described its Remote Grid Initiative in R.19-09-009,² in comments PG&E submitted in response to a December 30, 2019 Ruling³ requesting PG&E broadly report on planned microgrid-related resiliency activities.

¹ https://www.pge.com/pge_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/wildfire-mitigation-plan/2020-Wildfire-Safety-Plan.pdf

² <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M324/K944/324944715.PDF>, Attachment 1, Section II.E.

³ <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M323/K706/323706924.PDF>

PG&E confirmed in discussions with Energy Division Staff that it did not deploy 4-8 initial pilot projects in 2020, as originally described above. According to PG&E, one barrier to these initial deployments was the lack of a written contract, such as the Standalone Power System Supplemental Provision Agreement proposed under AL 6017-E.

PG&E provides further definition of Remote Grids in AL 6017-E:

The term “Remote Grid” as used in this Advice Letter means relatively small, permanently islanded distribution facilities serving customers who are generally located on remote portions of PG&E’s distribution system. The Remote Grid facilities will include a Standalone Power System (SPS) made up of local sources of electricity supply, such as solar photovoltaic generation, battery energy storage, and other fuel-powered generation, as well as distribution and service facilities to connect one or more customers to the [Standalone Power System], as shown in Figure 1. (AL 6017-E at p. 1)

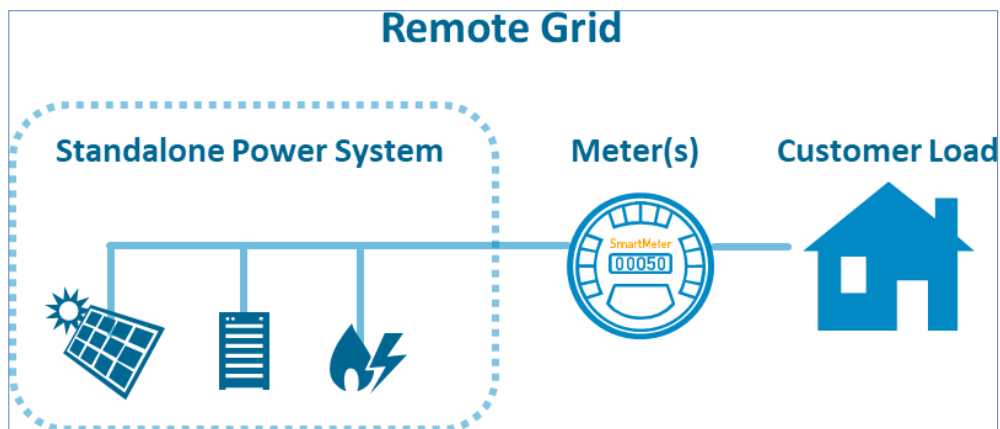


Figure 1: Diagram of example components of a Remote Grid

PG&E Remote Grids Cost-Effectiveness

In AL 6017-E, PG&E says it “is interested in providing service through Remote Grid facilities where such facilities will cost-effectively, safely, and reliably

provide service and mitigate wildfire and other safety and reliability risks in remote areas of PG&E's service territory." (AL 6017-E at p. 1).

In some cases, Remote Grids are likely to be both significantly less expensive and more effective at reducing wildfire risk than other wildfire mitigation measures. Certain distribution lines run for significant distances through High Fire Threat Districts to serve a small number of remotely located customers. De-energizing, decommissioning, and removing these lines and serving the remotely located customers with Remote Grids may avoid the cost of infrastructure hardening, avoid the cost of continued line maintenance, and reduce wildfire risk in a manner more cost-effective than other wildfire mitigation measures. The benefits of these avoided costs and reduced risks are expected to accrue to all distribution customers.

The specific use cases for Remote Grids are discussed in more detail in the Discussion section below.

PG&E is not Seeking any Incremental Cost Recovery in this Advice Letter

PG&E notes in its AL and reply to protests that it is not seeking any incremental cost recovery. PG&E will track and record any Remote Grid costs appropriately in existing memorandum, balancing, or other accounts in accordance with current CPUC guidance (AL-6017 at p. 3).

Remote Grids can be Consistent with Standard Utility Service

Although Remote Grids represent a somewhat novel and innovative grid technology, it is reasonable to expect that they can be deployed to provide reliable service consistent with standard utility tariffs. PG&E notes that for initial deployments "PG&E will own, operate, and maintain the Remote Grid facilities and equipment, although PG&E is open to exploring other ownership models in the future" (AL 6017-E at p. 2). Remote Grids would thus be owned and operated by PG&E and provide customers with "service consistent with PG&E's service obligations under other customer line extension agreements" (AL 6017-E at p. 1). PG&E asserts that Remote Grids require only minor changes and clarifications to PG&E tariffs as noted in the SPS Supplemental Provisions Agreement.

Standalone Power System Supplemental Provisions Agreement

In its Advice Letter, PG&E requests that the Commission find reasonable and approve its proposed Standalone Power System Supplemental Provisions Agreement, a form that supplements existing tariffs and service agreements under PG&E Electric Rules 15 and 16. The Supplemental Provisions Agreement identifies certain exceptions to current PG&E electric rules that are necessary to provide and maintain safe and reliable service using the Remote Grid facilities (AL 6017-E at p. 2). The reasonableness and necessity of these exceptions are discussed in the Discussion section below.

The Supplemental Provision Agreement would be offered by PG&E to certain remote customers on a limited basis, but would not be available to all customers. PG&E notes that it plans to initially offer Remote Grids at the locations offering the largest cost savings to distribution customers, and “may expand its use of Remote Grid in the future as a way to provide cost-effective, safe, and reliable service to remote customers while reducing wildfire risk” (AL 6017-E at p. 3).

NOTICE

Notice of AL 6017-E was made by publication in the Commission’s Daily Calendar. Pacific Gas and Electric states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

PG&E’s Advice Letter 6017-E was timely protested by the Sierra Club, jointly by Peninsula Clean Energy, Sonoma Clean Power Authority, Redwood Coast Energy Authority, Pioneer Community Energy, Central Coast Community Energy, and Marin Clean Energy (Joint CCAs), and jointly by the Microgrid Resources Coalition (MRC) and the California Solar and Storage Association (CalSSA).

PG&E responded to the protests of Sierra Club, Joint CCAs, and MRC and CalSSA, on January 11, 2021.

Joint CCAs Protest – January 4, 2021

In its protest, the Joint CCAs identify the following five areas of concern with AL 6017-E: (1) PG&E's proposal is not appropriate for an Advice Letter process, (2) PG&E's definition of Remote Grids and the scope of PG&E's Remote Grid Initiative are too vague and open ended, (3) PG&E erroneously characterizes Remote Grids as distribution assets, (4) PG&E's proposal does not adequately address Remote Grids in Community Choice Aggregator (CCA) service area, and (5) PG&E does not adequately describe needed tariff changes.

The Joint CCAs argue that without definite maximum thresholds on the number and size of remote grids, their deployment could far exceed the couple hundred small projects predicted by PG&E in its Advice Letter. According to their protest, AL-6017-E requests Commission approval for “an ambitious, open-ended *new program* that would have significant customer, rate and safety impacts” (Joint CCAs protest at p. 2, original emphasis). In addition, the Joint CCAs argue that characterizing Remote Grids as distribution assets may provide “an end-run around CCAs statutory right to provide CCA customers with generation service” (Joint CCAs protest at p. 5) and may affect rates. Characterizing these Remote Grids, which include a Standalone Power System, as distribution assets “could lead to unjust and unreasonable allocation of generation costs to distribution customers” (Joint CCAs protest at p. 5).

The Joint CCAs recommend that the Commission require PG&E to submit an amended AL with more detail and limited scope and instruct PG&E to file an Application seeking approval for the overall Remote Grid Initiative.

Sierra Club Protest – January 4, 2021

In its protest, the Sierra Club raises caution regarding the fuel-powered generation that would make up part of a Remote Grid Standalone Power System. Sierra Club recommends that Remote Grids be required to incorporate energy efficiency and demand response measures, and that the Commission require PG&E to submit a report regarding key environmental and public health impacts of the program. Specifically, Sierra Club recommends “that the Commission require PG&E to submit a report two years after deploying the first project, providing:

- i. The actual average level of renewables reached;

- ii. Estimated greenhouse gas and criteria pollutant emissions from deployed projects;
- iii. Aggregated customers' electricity usage before and after participating in the Remote Grid projects" (Sierra Club protest at p. 3).

MRC and CalSSA Protest – January 4, 2021

In their protest, MRC and CalSSA request that the Commission reject AL 6017-E, and instead consider the Remote Grid Initiative under the Resiliency and Microgrids Rulemaking R.19-09-009, where they say it was originally introduced. The parties say there has not been substantive input from the public or the microgrid industry in developing the Remote Grid Initiative, and point to there being "only a half-page conceptual overview of the Remote Grid Initiative" in PG&E's 2020 Wildfire Mitigation Plan (MRC and CalSSA protest at p. 2). They also argue that "it would be premature to approve the [Supplemental Provision Agreement] to allow PG&E to proceed with the Remote Grid Initiative" before the R.19-09-009 proceeding addresses the more complex issues of community microgrids.

PG&E Reply to Protests – January 11, 2021

In its reply to the three protests, PG&E notes that all the protests express support for the goals of the Remote Grid Initiative. PG&E responds to the protests with the following eight arguments.

First, many of the issues raised in the protests are outside the scope of AL 6017-E. AL 6017-E requests the Commission find reasonable and approve a specific form: PG&E's Remote Grid Supplemental Provisions Agreement. The Advice Letter does not request review or approval of specific Remote Grid candidate sites or customers, nor does PG&E request any cost recovery. The reasonableness of Remote Grid projects will be subject to review in separate cost recovery applications or will utilize funding approved in PG&E's General Rate Case. Thus, the Commission "need not, and should not, require PG&E to lock down all potential Remote Grid projects for this initial phase of the initiative" (PG&E reply at p. 5).

Second, PG&E generally agrees with the Joint CCAs that the additional stakeholder and Commission review of the Remote Grid Initiative is appropriate

before the program expands to cover many customers and areas. To ensure this outcome, PG&E proposes limiting the initial Remote Grid projects to no more than two megawatts of total customer load.

Third, PG&E commits to not deploy a Remote Grid project in a CCA service area without the concurrence of the CCA.

Fourth, because a key function of a Remote Grid system is to reduce distribution system rates and substitute for a distribution system asset, it is appropriately classified as a distribution asset and charged to distribution customers.

Fifth, AL 6017-E adequately describes all needed tariff and rate changes to implement the Remote Grid Initiative. The approval of the Remote Grid Supplemental Provisions Agreement is the only needed tariff change.

Sixth, MRC and CalSSA's proposal to reject AL 6017-E and instead consider the Remote Grid Initiative within the R.19-09-009 proceeding will "needlessly delay the deployment of initial Remote Grid projects and will potentially require PG&E to miss fleeting opportunities to deploy such projects in lieu of rebuilding fire-destroyed distribution lines through HFTDs [High Fire Threat Districts]" (PG&E reply at p. 8). PG&E did not introduce the Remote Grid Initiative within R.19-09-009, as claimed by MRC and CalSSA. Rather, PG&E described the initiative in response to a ruling requiring the large investor-owned utilities to list all resiliency activities and microgrid-related efforts that they had then underway.

Seventh, PG&E agrees with Sierra Club that "energy efficiency and demand response offer opportunities to reduce reliance on fuel-powered generation within Remote Grids over time" (PG&E reply at p. 8). PG&E will address this issue in more depth if it seeks further authorization for a scaled program.

Eighth, PG&E does not oppose the reporting requirements proposed by the Sierra Club.

DISCUSSION

The Commission has reviewed the Advice Letter and the protests, and finds that, with modifications, PG&E's proposed Remote Grid Standalone Power System Supplemental Provision Agreement is consistent with its duties to provide safe,

reliable electric service within its territory, and includes reasonable deviations from existing tariffs that are necessary to implement a limited volume of Remote Grids to mitigate wildfire risk from electrical infrastructure in a cost-effective and timely manner. In the Discussion section, we respond to various issues raised by party protests, and we provide directed modifications to PG&E.

It is reasonable and necessary for PG&E to clarify the respective roles and responsibilities of both PG&E and participating Remote Grid customers

Although Remote Grids can provide utility-level service to customers, they function differently from standard distribution lines and require some clarifications of and deviations from existing PG&E tariffs in order to realize potential savings for distribution customers. First, the standard distribution line is replaced by solar, batteries, and a generator, which may require a new land easement. Second, the Remote Grid system is designed to meet the customer's precise load and cannot draw on the larger electric system to easily increase capacity. Third, the Remote Grid system cannot accept energy exports to the same extent as the grid at large, limiting customer behind-the-meter generation. Fourth, it may be exorbitantly expensive and/or dangerous for PG&E to restore standard distribution service to Remote Grid customers in the event of termination of Remote Grid service. No parties protested the reasonableness or necessity of tariff changes related to these technical and functional differences of Remote Grid systems.

Given the difference between Remote Grid systems and standard distribution lines, we find it necessary and reasonable for PG&E to clarify the respective roles, restrictions placed upon, and responsibilities of both PG&E and participating Remote Grid customers, in order to realize potential savings for distribution customers. Further, we find it reasonable for PG&E to record a Memorandum of Agreement regarding the customer's Remote Grid service with the appropriate county recorder in order to ensure that potential successor owners of the property will be aware of the Remote Grid rules and restrictions. We note that, aside from the changes described in the Supplemental Provisions Agreement, all other utility obligations under PG&E's approved tariffs apply, including Rule 2 governing standard of service.

The Advice Letter Process is Appropriate Under General Order 96-B

General Order (GO) 96-B lists three primary uses for the Advice Letter process, including “to review a utility’s request to change its tariffs in a manner previously authorized by statute or Commission order, to conform the tariffs to the requirements of a statute or Commission order, or to get Commission authorization to deviate from its tariffs.”⁴ AL 6017-E is appropriate for the Advice Letter process under both the second and third of these use cases. AL 6017-E does not seek approval for the Remote Grid Initiative, but for a relatively minor tariff deviation that allows an initial set of Remote Grid projects to move forward.

Table 1: Remote Grid Use Cases (From AL-6017-E, page 5)

Use Case	Description
Wildfire Risk Mitigation in Tier 2 and 3 HFTD	In order to reduce wildfire ignition risk, Remote Grids could be deployed instead of conventional overhead hardening or underground conversion of an existing distribution line segment.
Rebuild	In order to restore service after distribution facilities are damaged in wildfire or other incidents, Remote Grids could be deployed where this alternative provides the long-term lowest risk and lowest cost solution.
Maintenance	In order to meet ongoing needs for distribution maintenance throughout the service territory, Remote Grids could be cost-effective alternatives where discrete or annual maintenance costs (vegetation, inspection, repairs, or replacement) are disproportionately high compared to the amount of customer load served.

PG&E lists three use cases for Remote Grid Projects, described in the table above. In each of these cases, Remote Grids may be the most cost-effective method for fulfilling PG&E’s pre-existing statutory and Commission-ordered obligations.

⁴ GO 96-B, General Rule 5.1.

For the first and second use cases, Remote Grids represent a method of mitigating wildfire risk in HFTDs and would make up part of PG&E's Wildfire Mitigation Plan, where the Remote Grid Initiative has been previously described.⁵ The Commission has already ordered PG&E to develop and carry out plans to mitigate wildfire risk in proceeding R.18-10-007, and given conditional approval to PG&E's Wildfire Mitigation Plan.⁶

For the second use case, Remote Grids would additionally fulfill the purpose of restoring regular service to customers in the case of damaged distribution facilities while maintaining customer safety and mitigating fire risk, as instructed by Commission GO 166,⁷ as well as to restore "such adequate, efficient, just and reasonable service, instrumentalities, equipment, and facilities . . . as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees and the public" as required under Public Utilities Code, Section 451. For the third use case, PG&E would be fulfilling its ongoing obligation to maintain its distribution infrastructure in a cost-effective way.

The Commission has already ordered PG&E to cost-effectively mitigate wildfire risk, to restore service to customers while maintaining public safety and reducing fire risk, and to maintain its distribution infrastructure. In addition, the Commission has already approved that PG&E track costs for wildfire mitigation, including Remote Grids, in its Wildfire Mitigation Program Memorandum Account,⁸ and regularly reviews for reasonableness and then approves spending on distribution infrastructure maintenance and rebuilding in PG&E's General

⁵ https://www.pge.com/pge_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/wildfire-mitigation-plan/2020-Wildfire-Safety-Plan.pdf.

⁶ Resolutions WSD-002 and WSD-003. WSD-002:
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M340/K859/340859823.PDF>; WSD-003:
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M340/K895/340895473.PDF>

⁷ CPUC General Order 166:
https://docs.cpuc.ca.gov/PUBLISHED/GENERAL_ORDER/159184.htm

⁸ Resolution WSD-003, Ordering Paragraph 7.

Rate Cases. AL 6017-E does not request that the Commission approve any specific Remote Grid Projects, or any rate recovery. Instead, the Advice Letter requests the Commission approve a deviation from PG&E's tariffs for a limited total volume of customer load in order to conform the tariffs to previous Commission orders, and allow PG&E to pursue Remote Grids to the extent they may fulfill its existing obligations. As such, the approval of the Standalone Power System Supplemental Provision Agreement requested in AL-6017-E is appropriate for the Advice Letter process under GO 96-B. The actions taken in this Resolution are also consistent with the vision adopted in the CPUC's 2016 Distributed Energy Resources Action Plan,⁹ specifically the Commission's interest in unleashing ratepayer benefit through the strategic use of distributed energy resource investments.

The Commission also considers AL 6017-E to be appropriate for the AL process because it follows GO 96-B in requesting "Commission authorization to deviate from its tariffs." Remote Grids may provide cost savings only in very particular locations, where a small number and size of customer loads are located at the end of a long section of radial distribution line that otherwise would not need to exist. Even in a hypothetical eventual mature state of the Remote Grid Initiative, AL 6017-E notes that Standalone Power Systems would serve no more than a few thousand of PG&E's about 5 million electric customers.¹⁰ In its reply to protests, PG&E proposes to limit the size and number of Remote Grids more definitively, by initially authorizing the Supplemental Provisions Agreement for use on no more than two megawatts of peak historical customer load.

Remote Grids provide additional benefit to ratepayers the sooner they are deployed. The 2021 fire season fast approaches, and PG&E has limited opportunity to use Remote Grids to mitigate wildfire risk before it arrives. Opportunities to use Remote Grids to replace damaged distribution infrastructure are also both rare and, because the infrastructure may need to be rebuilt or hardened without a clear alternative, fleeting. Given this situation, the

9

[http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Commissioners/Michael_J_Picker/DER%20Action%20Plan%20\(5-3-17\)%20CLEAN.pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Commissioners/Michael_J_Picker/DER%20Action%20Plan%20(5-3-17)%20CLEAN.pdf)

¹⁰ AL-6017-E p. 5. This would be fewer than 0.1% of PG&E customers.

Commission sees Remote Grids as particular opportunities to reduce ratepayer costs and increase public safety, arising only at specific times and in specific places. To seize opportunities of this sort, it is appropriate for PG&E to submit an Advice Letter seeking to deviate from its tariffs.

The Commission disagrees with the argument from the Joint CCAs that the AL seeks to approve “an ambitious, open-ended *new program* that would have significant customer, rate and safety impacts” (Joint CCA protest at p. 2, emphasis original). The Remote Grids Initiative appears to be oriented towards maintaining compliance with PG&E’s duty to safely and reliably serve customers at just and reasonable rates. We agree with and appreciate, however, the Joint CCAs’ caution that, without clear definitions or upper boundaries on the number and size of Remote Grids, we “leave open the possibility of a potentially significant expansion of the program beyond the current program intent implied in the Advice Letter” (Joint CCA protest at p. 4). In response to this concern, we find it reasonable to impose a limit on the extent to which PG&E can use the Standalone Power System Supplemental Provisions Agreement without further Commission approval. As recommended by PG&E in their own reply, we limit the use of this new form to be used to serve no more than two megawatts (MWs) of historical measured peak customer load. We ask that PG&E cap the number of MWs actually served under these agreements, but we recognize that due to planning, forecasting and implementation uncertainties inevitably arising from customer-specific situations, the utility may engage with a larger amount of load as various projects move from the initial investigation through implementation phases. In addition, this cap is intended to serve as a limit on small customers, likely residential, but PG&E can always file an additional customer-specific tariff deviation for a uniquely situated large customer that would alone fill up or exceed the two MW peak load served limit. We see this cap as a first guardrail preventing the rapid expansion of remote grid systems without sufficient Commission review, and not as a barrier to seizing unexpected opportunities to reduce ratepayer costs as they arise. In this light, we encourage PG&E to notify the Commission of any potential need to reconsider the two MW cap, prior to it becoming a barrier.

We conclude that AL 6017-E seeks a reasonable deviation to PG&E tariffs in order (1) “to conform the tariffs to the requirements of a statute or Commission order” and (2) “to get Commission authorization to deviate from its tariffs,” and is thus appropriate under GO 96-B General Rule 5.1.

According to GO 96-B, General Rule 9.5.6, PG&E is generally required to list the name and location of each customer taking service under a tariff deviation:

*Except and to the extent excused by statute or Industry Rule or other Commission order, each utility shall compile and publish in its tariffs a list of all contracts and other deviations under which the utility provides service at rates or under conditions other than those contained in its tariffs then in effect. For each such contract or other deviation, the list shall state: the name and location of the customer; the type or class of service; dates of execution and expiration; the date and number of the Commission order authorizing the contract or other deviation; and the utility's most comparable rate schedule, together with a summary of how the contract or other deviation differs from that schedule.*¹¹

In this case, PG&E requests approval to use a specific form, the Standalone Power System Supplemental Provisions Agreement, to cover up to two megawatts of historical peak measured customer load. This deviation was not requested by, or on behalf of, potential remote grid customers in particular. We anticipate the limited approval of this form will lead to savings for all distribution customers, but potential remote grid customers may object to their names and locations being published publicly in PG&E's tariffs. Without a Commission order excusing PG&E from this General Rule, PG&E would be required to reveal individual identifying information on particular residential customers, customers who agree to a tariff deviation for the benefit of all distribution customers. In addition, frequent updates to PG&E's List of Contracts and Other Deviations¹² would present an unnecessary barrier to the deployment of Remote Grids and create unnecessary additional work for both PG&E and Commission staff. Given that this Resolution approves the limited use of the Supplemental Provisions Agreement and that additional reporting of customer information raises privacy concerns, we find it reasonable to exempt PG&E from the requirements of GO 96-B, General Rule 9.5.6. In lieu of these requirements, we find it reasonable for PG&E to maintain an internal list of remote grid

¹¹ GO 96-B, General Rule 9.5.6, emphasis added.

¹²

https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_CONTRACTS_List%20Of%20Contracts%20And%20Deviations.pdf

customers available to the Commission upon request. PG&E may consider this internal list confidential but should strive to make some amount of reporting publicly available so that these initial projects can be referenced. PG&E shall annually submit a Tier 1 informational Advice Letter with Energy Division, including this list, to fulfill the transparency goals of General Rule 9.5.6.

Initial Remote Grid Projects Need Not be Deliberated in a Proceeding

MRC and CalSSA protest and request that the Advice Letter be rejected due to a lack of public and microgrid industry input. They claim the Remote Grid Initiative has been introduced in R.19-09-009, and that it would be premature to proceed with Remote Grids without addressing the more complex issues of community microgrids in Track 3 of that proceeding.

We find the claim that the Remote Grid Initiative was introduced in R.19-09-009 to be erroneous (MRC and CalSSA protest at 2). As noted in PG&E's response, PG&E identified the Remote Grid Initiative then underway in response to a December 30, 2019 Email Ruling in the R.19-09-009 proceeding but did not seek approval for the initiative in that proceeding (PG&E reply at p. 8). Even if the initiative was discussed within a formal proceeding, that alone would not itself bar approval of this Advice Letter.¹³ The approval of the Standalone Power System Supplemental Provision Agreement, as noted above, is a minor tariff deviation that may allow PG&E to comply with existing obligations and emergent conditions of elevated fire risk and allow PG&E to respond in a rapid and cost effective manner to unique opportunities to mitigate wildfire risk. We need not await Commission deliberation on the distinct and significantly more complex issue of community microgrids, as claimed by MRC and CalSSA in their protest (MRC and CalSSA protest at p. 2). Because PG&E plans to consider Remote Grids as distribution assets, PG&E has committed to not pursuing Remote Grids in CCA territories without CCA agreement, the volume of Remote Grids is limited to two megawatts total, and this deviation shall not be precedential as to proposals beyond the immediate approval; we find that this deviation need not be deliberated in a proceeding. We anticipate that the

¹³ See General Order 96-B, General Rule 7.4.2 for a list of appropriate grounds for protest of an Advice Letter.

experience provided by this limited program will help inform our formal consideration of more complex situations raised by protesting parties.

Complex Tariff Changes are Not Appropriate for Initial Projects

Sierra Club protests the AL and claims the Remote Grid Initiative does not sufficiently incorporate Energy Efficiency and Demand Response. As noted above, the AL is not requesting Commission review of the Remote Grid Initiative, but of a tariff deviation that allows a limited volume of Remote Grid projects to move forward. While various statutes require that the Commission must focus on Energy Efficiency and Demand Response followed by non-polluting renewable resources for long term grid reliability;¹⁴ the two megawatt total cap of customer load under this proposal assures that this effort does not significantly undermine the Commission's ambitious environmentally related procurement goals before the utility can gain some experience with implementing some initial projects. With experience, the CPUC will be better able to understand whether the Remote Grid Initiative furthers or hinders other goals.

Customers who may participate in the proposed Remote Grids will in general continue to be eligible for existing PG&E Energy Efficiency programs (PG&E reply at p. 8). Further, PG&E says it "looks forward to proposing additional offerings to reduce the emissions and increase the cost-effectiveness of these Remote Grids if it seeks further authorization for a scaled program" (PG&E reply at p. 9). We agree that further developments of the Remote Grid Initiative, and significant modification to PG&E tariffs or programs beyond the deviation sought here, may require deliberation in a formal proceeding. For the initial volume of projects allowed in this resolution, the Commission finds it reasonable to maintain customers' current tariff options and rate structure, other than the deviation for the addition of the Supplemental Provision Agreement.

Remote Grid Systems Should Be Initially Classified As Distribution Assets

The Joint CCAs protest and request that the AL be amended based on an alleged mischaracterization of Remote Grid Systems as distribution assets. They argue

¹⁴ Public Utilities Code, Section 454.51, subdivision (a).

that, because Standalone Power Systems will generate power for customers, they should be considered generation assets. In its reply, PG&E argues that because the primary function of Remote Grids is to replace sections of distribution line, they are correctly characterized as distribution assets.

The Joint CCAs claim that classifying Remote Grids as distribution assets “could lead to unjust and unreasonable allocation of generation costs to distribution customers” (Joint CCAs protest at p. 5). This assertion is partially correct but also misleading. A very small minority of generation customers being served directly by distribution assets would have a minimal effect on generation rates; and we anticipate this rate impact to *lower rather than raise rates*. In discussions between Energy Division Staff and PG&E, PG&E clarified that the distribution savings from a Remote Grid project over 40-years are generally one or more orders of magnitude larger than the total value of the generation rate component from the Remote Grid customers over the same period. By contrast and as noted in PG&E’s reply, it would arguably be unjust and unreasonable to burden PG&E generation customers with the cost of an asset that primarily serves to lower costs for all distribution customers, including CCA customers.

Given this situation, we agree with PG&E that it is reasonable to characterize Remote Grids as distribution assets to the limited extent and actual service volume authorized by this Resolution. As discussed above, this Resolution allows PG&E to deploy Remote Grids up to a limited cap. The effect of these projects is anticipated to reduce costs for distribution customers due to both reduced wildfire risk and avoided maintenance or replacement of distribution infrastructure. If a future enlarged Remote Grid Program comes before the Commission, we may reconsider many of these issues in light of experience gained by PG&E. We may need to address potential effects on generation rates. However, we choose not to sacrifice the greater benefits to distribution customers from a limited and rapid deployment of Remote Grids in the face of their likely insignificant effects on generation rates. We urge PG&E to maintain detailed records on all projects – both those considered for inclusion in the scope of the initiative and as well as of course those fully implemented – so that the information can be utilized in future analysis.

PG&E Must Report to the Commission on the Performance of Initial Remote Grid Systems

Sierra Club protests the Advice Letter and requests that the Commission modify the request to “require PG&E to disclose the emission factors and total emission quantities expected from the Remote Grid facilities in order to fully understand and weight the impacts of these projects” (Sierra Club protest at p. 3). In its reply, PG&E agreed it was reasonable to report back on Remote Grids two years after the first project comes online (PG&E reply at p. 9).

We find it reasonable to require PG&E to file a report describing the Remote Grid projects and their environmental impacts two years after the first Remote Grid comes online. The report should include information about the process undertaken to identify projects, design projects, remove projects from consideration of inclusion in the initiative, as well as implement projects. System operational data, including reliability information, should be provided to demonstrate that the systems compare to PG&E’s reliability statistics.

PG&E should work with CCAs when installing Remote Grids for CCA customers

Joint CCAs protest the Advice Letter and request it be modified to better address Remote Grids in CCA service areas. They request that this Resolution direct PG&E to submit an Application with “a detailed formal proposal for ensuring that CCAs are fully integrated into PG&E’s processes for planning, siting, and developing Remote Grids prior to beginning the planning process” (Joint CCAs protest at p. 6). As noted above, the Advice Letter requests a tariff deviation that allows a limited volume of Remote Grid projects to move forward, not a detailed Commission review of a new program. Further, we observe PG&E’s commitment not to deploy Remote Grids in CCA service area without the concurrence of the CCA (PG&E reply at p. 6). As such, we find that Joint CCAs protest appears to be moot. We also find it reasonable for PG&E to obtain written concurrence from a CCA before deploying any Remote Grids in a CCAs service area.

COMMENTS

This Resolution was mailed on February 11, 2021. Comments were timely filed on or before March 3, 2021 by Pacific Gas and Electric Company (PG&E).

PG&E expresses support for the Resolution.

FINDINGS

1. Remote Grids may be useful to mitigate wildfire risk from electrical infrastructure in a cost-effective and timely manner, reducing costs for distribution customers and improving public safety.
2. Deploying Remote Grids may facilitate PG&E in carrying out previous Commission orders and fulfilling its existing obligations.
3. It is reasonable and necessary for PG&E to execute the Supplemental Provisions Agreement with Remote Grid participants to clarify the respective roles, restrictions placed upon, and responsibilities of both PG&E and the participating customer.
4. To the extent the Supplemental Provisions Agreement for the Remote Grid varies from or clarifies existing PG&E electric rules, tariffs, or programs, those deviations and clarifications are necessary and reasonable for the limited volume of customer load approved herein.
5. It is reasonable for PG&E to record a Memorandum of Agreement regarding the customer's Remote Grid participation with the appropriate county recorder in order to ensure that successor owners of the property will be sufficiently aware of the Remote Grid rules and restrictions.
6. The Advice Letter process under General Order 96-B may be used by a utility to gain authorization of a discrete deviation from its generally applicable tariff under General Rule 5.1.
7. It is reasonable and necessary to impose a limit of two megawatts of historical measured peak customer load on the extent to which PG&E can use the Standalone Power System Supplemental Provisions Agreement in order to qualify as a deviation under General Order 96-B, General Rule 5.1, and in order to prevent a larger than expected use of the Supplemental Provisions Agreement.
8. For the initial set of Remote Grid customers, it is reasonable to maintain the customer's current tariff options and rate structure, including the customer's existing transmission, distribution, and generation bill components.
9. It is reasonable to approve a requested tariff deviation that allows significant savings for distribution customers, including if that change may lead to small reductions in generation rates that may differ between customers.
10. All Remote Grid systems installed, up to the two megawatt cap approved herein, should be characterized as distribution assets for cost accounting purposes unless and until the Commission provides alternative direction.

11. It is reasonable to require PG&E to file a report describing its deployed Remote Grid projects and their environmental impacts two years after the first Remote Grid comes online.
12. It is reasonable to require PG&E to obtain written concurrence from a Community Choice Aggregator (CCA) before deploying a Remote Grid in that CCA's service area.
13. Requiring PG&E to update its List of Contracts and Other Deviations in its tariffs with the names and locations, as well as other information, for all remote grid customers covered by the tariff deviation approved herein (according to GO 96-B, General Rule 9.5.6) would raise privacy concerns and present an unnecessary barrier to the deployment of remote grids.
14. It is reasonable to exempt PG&E from the requirements of GO 96-B, General Rule 9.5.6, for remote grid customers up to the two megawatt cap approved herein, and to instead require PG&E to maintain an internal list of remote grid customers and to submit an Advice Letter annually to the Commission listing these participants.

THEREFORE IT IS ORDERED THAT:

1. The request of PG&E to approve the Remote Grids Standalone Power System Supplemental Provisions Agreement and the deviation from and clarifications to existing tariffs that it contains, as requested in Advice Letter 6017-E, is approved with the modifications set forth below and otherwise specified herein.
2. The approval of the Supplemental Provisions Agreement applies only to an initial set of remote grid customers up to a total of two megawatts of operational systems, based on the historical measured peak customer load.
3. Two years after the first remote grid comes online under the terms of one of these Agreements, PG&E must file a report describing the projects including, at minimum, the actual average level of renewables used by the Standalone Power Systems and an estimate of the Greenhouse Gas and criteria pollutant emissions from the projects. PG&E should include other information about the experience gained from the implementation of this initiative. This report may be standalone or cite already submitted information in PG&E's regular reports to the Wildfire Safety Division.

4. PG&E shall obtain written concurrence from a Community Choice Aggregator (CCA) before deploying a Remote Grid in that CCA's service area.
5. PG&E shall be exempt from the requirement of GO 96-B, General Rule 9.5.6 to publicly list customers with tariff deviations, for remote grid customers up to the two megawatt cap approved herein. In lieu of the requirements of General Rule 9.5.6, PG&E must maintain an internal list of remote grid customers served under the tariff deviation approved herein and, if the list has changed, annually file a Tier 1 informational Advice Letter including that list. The Advice Letter may be, in part or in full, confidential.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on March 18, 2021; the following Commissioners voting favorably thereon:

/s/ Rachel Peterson

RACHEL PETERSON
Executive Director

MARYBEL BATJER
President

MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
DARCIE HOUCK
Commissioners