BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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

Rulemaking 19-09-009
(Filed September 12, 2019)

OPENING COMMENTS OF THE CLIMATE CENTER AND VOTE SOLAR ON THE PROPOSED DECISION ADOPTING SHORT-TERM ACTIONS TO ACCELERATE MICROGRID DEPLOYMENT AND RELATED RESILIENCY SOLUTIONS

Lorenzo Kristov, Ph.D.
Consultant to Vote Solar
PO Box 927
Davis, CA 95617
Telephone: (916) 802 7059
Email: LKristov91@gmail.com

Susannah Churchill Vote Solar
360 22nd St. Suite 730
Oakland, CA 94612
Tel: (415) 817-5065
Email: susannah@votesolar.org

W. Woodland (Woody) Hastings
Energy Program Manager
The Climate Center
PO Box 3785
Santa Rosa, CA 95402
Tel: (707) 829-3460
E-mail: woody@theclimatecenter.org

May 19, 2020
SUBJECT INDEX OF RECOMMEND CHANGES

1. Improvements are needed to the proposed data sharing portal;
2. Increased utility staff resources and linkage to distribution planning are needed for rapid interconnection;
3. An effective, uniform community microgrid enablement program is needed for each utility;
4. The Commission should require islanding capability for NEM solar+storage projects to provide backup power during grid outages;
5. Improvements to the outreach and communication process are needed;
6. Local governments, tribal authorities and community choice agencies should be initially consulted regarding utility resiliency proposals and have the opportunity to propose alternatives;
7. SDG&E’s proposed local area distribution controller (LADC) should not be approved.
TABLE OF CONTENTS

I. INTRODUCTION ......................................................................................................................... 1
II. THE COMMISSION SHOULD CLARIFY THAT THIS TRACK 1 DECISION DOES NOT RESOLVE MICROGRID COMMERCIALIZATION ISSUES THAT WILL BE ADDRESSED IN TRACK 2 ................................................................................................................................. 4
III. IMPROVEMENTS ARE NEEDED TO THE PROPOSED DATA SHARING PORTAL 6
IV. INCREASED UTILITY STAFF RESOURCES AND LINKAGE TO DISTRIBUTION PLANNING ARE NEEDED FOR RAPID INTERCONNECTION .................................. 7
V. AN EFFECTIVE COMMUNITY MICROGRID ENABLEMENT PROGRAM IS NEEDED FOR EACH UTILITY ................................................................................................................. 8
VI. THE COMMISSION SHOULD REQUIRE ISLANDING CAPABILITY FOR NEM SOLAR+STORAGE PROJECTS TO PROVIDE BACKUP POWER DURING GRID OUTAGES .......................................................................................................................... 9
VII. NEEDED IMPROVEMENTS TO THE OUTREACH AND COMMUNICATION PROCESS ............................................................................................................................... 9
VIII. LOCAL GOVERNMENTS, COMMUNITY CHOICE AGENCIES AND TRIBAL AUTHORITIES SHOULD HAVE THE OPPORTUNITY TO PROPOSE ALTERNATIVES TO UTILITY RESILIENCY PROPOSALS ........................................ 10
IX. SDG&E’S PROPOSED LOCAL AREA DISTRIBUTION CONTROLLER SHOULD NOT BE APPROVED .................................................................................................................. 11
X. CONCLUSION ................................................................................................................................. 12

Appendix A: Changes to Findings of Fact, Conclusions of Law and Ordering Paragraphs

TABLE OF AUTHORITIES

Statutes
OPENING COMMENTS OF THE CLIMATE CENTER AND VOTE SOLAR ON THE PROPOSED DECISION ADOPTING SHORT-TERM ACTIONS TO ACCELERATE MICROGRID DEPLOYMENT AND RELATED RESILIENCE SOLUTIONS


I. INTRODUCTION

The Climate Center and Vote Solar (referred to hereafter as “the Joint Parties”) respectfully submit these comments pursuant to Administrative Law Judge Rizzo’s April 29 Proposed Decision (“PD”) adopting short-term actions to accelerate microgrid deployment and related resiliency solutions. The Climate Center is a California 501(c)(3) nonprofit organization founded in 2001 with a mission to deliver rapid greenhouse gas (GHG) reductions at scale, starting in California. Vote Solar is a 501(c)(3) non-profit organization, working to lower solar costs and expand solar access. Vote Solar advocates for state policies and programs needed to repower our electric grid with clean energy.

The Joint Parties commend the Commission for crafting a strong PD that takes many valuable short-term steps to facilitate microgrid development, to enhance collaboration between the utilities and local government and tribal authorities, and to address community resiliency needs as the 2020 wildfire season approaches.

We strongly support the following initiatives identified in the Proposed Decision:
- The adoption of standardized consistent single line templates for Rule 21 non-export storage;
- NEM-paired storage and NEM solar interconnection procedures;
- A template-based application process for non-export storage < 10 kW, NEM-paired storage (AC couple and DC coupled) < 30 kW solar and < 10 kW storage, < 30 KW storage;
- Adoption of a goal that 80% of interconnections be based on template design;
- Adoption of procedures to minimize the need for field inspections;
- Addition of staff at each of the utilities to accelerate interconnections;
- Establishment of an expedited interconnection process for qualified resiliency projects;
- Revision of the NEM tariff to allow qualified behind-the-meter energy storage systems to charge from the grid in advance of a PSPS event;
- Modification of the NEM tariff to remove the storage sizing limit for NEM-paired storage;
- Requiring utilities to provide access by local and tribal governments to utility data through a secure internet portal in order to support community resiliency solutions;
- Requiring utilities to proactively engage with local and tribal governments to build and sustain effective relationships to improve community resilience;
- Structuring agendas for local and tribal meetings that includes education about how the transmission and distribution systems operate, local grid topology, plans for T&D upgrades, predictions for future PSPS events and consideration of local and tribal government input;
- Requiring utilities to develop resiliency project engagement guides for local and tribal governments for the design and deployment of resiliency projects;
- Requiring utilities to develop access-restricted portals for local and tribal governments populated with data needed to identify in front of the meter microgrid development opportunities;
- Conditional authorization of PG&E's make-ready program at specific substations to keep customers energized during PSPS events;
- Requiring that PG&E’s make-ready costs be subject to a reasonableness review in PG&E's next GRC;
• Requiring that PG&E test and demonstrate technology alternatives for its temporary generation program;

• Requiring PG&E to make a compliance filing that includes the number of diesel generators employed and hours operated, and a summary of GHG and criteria air pollution emissions for 2020;

• Approval of elements of PG&E's Community Microgrid Enabled Program to provide technical and financial support on a prioritized basis for community-requested microgrids for PSPS mitigation purposes.

At the same time, we are concerned about areas of the PD that could inadvertently preempt Commission resolution of matters that should be taken up explicitly in Track 2 of this proceeding with the full and open participation by all parties and stakeholders. Our concerns relate specifically to matters necessary to fulfill the directive of SB 1339 that the Commission provide for the commercialization of microgrids. Section II of these comments expands on this concern.

In addition, the Joint Parties have several recommendations to further improve the PD. Those recommendations are summarized below and further elaborated in the subsequent comments.

1. Improvements are needed to the proposed data sharing portal;
2. Increased utility staff resources and linkage to distribution planning are needed for rapid interconnection;
3. An effective, uniform community microgrid enablement program is needed for each utility;
4. The Commission should require islanding capability for NEM solar+storage projects to provide backup power during grid outages;
5. Improvements to the outreach and communication process are needed;
6. Local governments, tribal authorities and community choice agencies should be initially consulted regarding utility resiliency proposals and have the opportunity to propose alternatives;
7. SDG&E’s proposed local area distribution controller (LADC) should not be approved;
Finally, the Joint Parties note that the PD directs the IOUs to file numerous advice letters, most of which are due within 30 days of the final Track 1 decision, and a few more within the next 30 days. We recognize the need to use advice letters to move expeditiously to implement the directives of the decision, but the Commission must recognize the challenge this presents to parties trying to monitor the IOUs’ proposed implementations. We request that the Commission consider ways to facilitate parties’ review and comment on the various advice letters ordered by this decision, perhaps through web conferences facilitated by Commission staff where the IOUs present their advice letter proposals and parties have the opportunity to ask questions and express concerns.

II. THE COMMISSION SHOULD CLARIFY THAT THIS TRACK 1 DECISION DOES NOT RESOLVE MICROGRID COMMERCIALIZATION ISSUES THAT WILL BE ADDRESSED IN TRACK 2.

Given Track 1’s goal of adopting near-term measures to facilitate rapid deployment of resiliency solutions in anticipation of likely PSPS events during the coming fire season, the Joint Parties believe it is important that the Commission clearly state that essential regulatory measures aimed at commercializing microgrid development, as directed by SB 1339, remain open to be fully addressed in Track 2, and that elements of the Track 1 decision are not intended to predispose the outcome of such Track 2 issues.

The Joint Parties note at least two areas where such clarification is necessary. First, with regard to PG&E’s Community Microgrid Enablement Program (CMEP), the PD notes that “creation of community microgrid tariffs” is an element of PG&E’s proposal. While the PD does not comment on this element of the CMEP explicitly, it does state the Commission’s intent to approve the CMEP “subject to certain requirements” that do not seem to pertain to community microgrid tariffs. We are therefore concerned that the decision could be interpreted as Commission authorization for PG&E to develop community microgrid tariffs through the advice letter process.¹

¹ A community microgrid is a microgrid comprised of multiple resources and loads at different points of interconnection to the distribution system and that utilizes utility-owned and operated distribution facilities.
The Joint Parties strongly urge the Commission to explicitly decline to approve PG&E’s proposal to create community microgrid tariffs in the Track 1 decision. The matter of community microgrids is too complex to be addressed in a utility advice letter, but rather should be an explicit part of the scope of Track 2 to be addressed with the full participation and input of all parties. Moreover, to fulfill the statutory mandate of SB 1339 to commercialize microgrids, community microgrid tariffs should be uniform across all three IOUs rather than developed separately by and for each IOU.

Community microgrid tariffs should ensure that microgrids are not subject to discriminatory fees such as departing load charges or opaque interconnection costs. As part of the development of community microgrid tariffs in Track 2, the Commission should review the IOUs’ administration of Wholesale Distribution Access Tariffs, Rule 18, and other existing regulations that may relate to microgrids. This review process will allow the Commission to thoroughly assess the regulatory barriers that currently exist for community microgrids and provide a venue for parties to propose solutions to those barriers. If a review determines that legislative action is needed to remove barriers to development of community microgrids, the Commission should submit a report to the legislature outlining the barriers identified through a formal stakeholder process so policymakers can enact legislative solutions in 2021 that will unlock the full promise of community microgrids.

Second, with regard to SDG&E’s proposal to acquire the Local Area Distribution Controller (LADC) system from its affiliate, in a later section of these comments we argue that the Commission should not approve this proposal. Nevertheless, if the Commission does approve SDG&E’s acquisition of the LADC, it should clarify that its approval of SDG&E’s acquisition of the proprietary LADC system is separate and distinct from and does not in any way predispose Commission resolution of issues related to third-party operation and control of a community microgrid.

The many issues related to development and operation of community microgrids are essential to fulfilling the Legislative direction of SB 1339 to advance commercialization of microgrids. At the core of this subject are questions regarding the appropriate role(s) of the IOU distribution utilities, the potential for third parties to develop and operate community microgrids and, if third party operators are found to be a viable and beneficial option, the appropriate relationship between a third-party microgrid operator and the distribution utility.
These questions are far too important for their resolution to somehow bypass a full and explicit consideration within this proceeding. The Track 1 decision should make it clear that third-party development and operation of community microgrids and the utility roles and responsibilities with regard to community microgrids will be addressed in Track 2 of this proceeding, and that should the Commission approve SDG&E’s LADC in Track 1, that approval in no way resolves or predisposes the resolution of these matters.

III. IMPROVEMENTS ARE NEEDED TO THE PROPOSED DATA SHARING PORTAL

Critically important to the rapid and targeted deployment of resilience projects will be utility engagement with local and tribal governments, including the cooperative development of an online portal for data sharing. Local and tribal communities are best situated to lead resilience planning through identification of key critical facilities. The PD proposes an access-restricted portal. We recommend that the utilities adopt a more flexible and proactive approach to data sharing, including open online access necessary to provide data and guidance to individuals and businesses wishing to participate in resilience planning. Within this collaborative process, potential microgrid applicants should be able to submit questions and proposed plans to local and tribal governments, who can use that information to refine their resilience plans.

A key element of data sharing will be around the interconnection of microgrid facilities. Rapid interconnection is essential to the timely and effective development of renewable energy microgrids. Establishment and dissemination of pre-approved designs or templates will be a key element facilitating interconnection. Developing an online sign-off system that utilizes clear eligibility criteria, standardized verification procedures and prompt communication between interconnection applicants, electric utilities and regulatory agencies is also essential.

Elimination of battery storage size limitations for NEM-qualified microgrids is also necessary for developing resiliency projects at schools and community facilities as well as homes and businesses. The data sharing portal should explicitly address this issue to enable optimal sizing of resiliency projects that will operate as autonomous systems capable of charging from the grid in advance of PSPS events. Sharing data and supporting customers and communities in developing clean generation tasked with charging storage capacity as should be the top priority of Track 1. Utilities should be directed to assist projects in developing the capabilities to provide
valuable grid services during normal operations and essential local electric services during future PSPS events.

IV. INCREASED UTILITY STAFF RESOURCES AND LINKAGE TO DISTRIBUTION PLANNING ARE NEEDED FOR RAPID INTERCONNECTION

Interconnection is one of the biggest barriers to rapid deployment of clean energy projects. The number of interconnection applications that utilities can expect to process for resiliency projects and microgrids will increase dramatically in response to the threats of wildfires and PSPS. Not only should each utility increase staff allocated to performing interconnection studies, they should also be required to adopt specific timelines for improved interconnection review. Additional resources should also be targeted to the development of secure, online processes that are part of the data sharing portal described in Section III of these comments.

Streamlined interconnection should be linked to distribution system planning. Local distribution system infrastructure investments should be informed by community-utility collaboration aimed at developing transparent interconnection approval protocols that self-execute when all criteria are met. Such collaboration should also increase participation in the development of resiliency projects because developers, site owners and customers will know the areas targeted for upgrades and will be able to rely on expedited approval for projects that meet the requisite criteria.

An initial focus on identifying microgrids needed for critical facilities in distribution upgrade plans is appropriate. However, in the longer run microgrid commercialization will depend upon a reasonable level of certainty in interconnection approval and cost that impact project ROI and incentivize private investment.

The Joint Parties strongly support a specific commitment of additional staff resources by each utility for interconnection and distribution system planning studies. Likewise, we support the development of utility plans for the improvement of information technology solutions that will facilitate the faster processing of interconnection applications for resiliency projects.
V. AN EFFECTIVE COMMUNITY MICROGRID ENABLEMENT PROGRAM IS NEEDED FOR EACH UTILITY

PG&E has proposed a Community Microgrid Enabled Program (CMEP) to enhance resilience of critical facilities and customer groups located in areas prone to outage events from wildfires. The CMEP has been described in only the most general terms, and the PD proposes that PG&E submit an Advice Letter within 60 days of a decision proposing eligibility criteria and program implementation details.

The CMEP contemplates utility technical support, such as project scoping, pre-application technical project design guidance, and a dedicated PG&E project management office to provide support for CMEP projects. One-time matching funds of up to $60.75 million has been recommended by PG&E to be made available as matching grants to defray the cost of special facilities or distribution system upgrades required by these microgrid projects. The Joint Parties support these elements of PG&E’s CMEP proposal.2

The CMEP proposal should serve as a template for Southern California Edison (SCE) and San Diego Gas and Electric (SDG&E) for improving resiliency in their service territories. For purposes of this Track 1 proceeding, the Joint Parties request that the Commission direct each utility to develop an effective technical assistance and financial incentive program for developing community microgrids, along the lines of PG&E’s CMEP.3

---

2 The PD on Page 67 erroneously states that Vote Solar was opposed to the Community Microgrids Enablement Program and cites Vote Solar’s February 6, 2020 Reply Comments on Staff and IOU Proposals. On page 13 of those comments Vote Solar states “Vote Solar agrees with the Climate Center that IOUs should support local government organizations interested in microgrids by providing technical assistance and financial incentives for developing microgrids. PG&E’s Community Microgrid Enablement Program (CMEP) provides a conceptual framework for reducing the impacts of PSPS events on vulnerable communities and populations. We also agree with the Climate Center that funds that PG&E has requested for its Make Ready efforts be re-directed in whole or in part to CMEP.” We request that the record in the final decision be corrected.

3 As noted in section II of these comments, the Joint Parties do not support PG&E’s proposal to create community microgrid tariffs under the CMEP proposal, and we urge the Commission to explicitly reject this element of CMEP in its Track 1 decision and include this topic in the scope of Track 2. Any extension of CMEP elements to the other IOUs should similarly exclude creation of community microgrid tariffs.
VI. THE COMMISSION SHOULD REQUIRE ISLANDING CAPABILITY FOR NEM SOLAR+STORAGE PROJECTS TO PROVIDE BACKUP POWER DURING GRID OUTAGES

The staff white paper on short-term actions to accelerate the deployment of microgrids and related resiliency solutions offered two alternative proposals for modifying net energy metering (NEM) rules to remove storage sizing limits. The PD observes that the two proposals are identical except that Proposal 1 requires the up-sized NEM systems be capable of islanding. The PD proposes to adopt Proposal 2 and consider further development of implementation details in Track 2 or Track 3 of the proceeding. The PD states that its reason for deferring the decision about islanding capability is to avoid the risk of delays due to implementation complexity.4 We strongly disagree with the choice of Proposal 2, for two reasons.

First, the Commission’s stated objective for this element of the PD is to realize “the potential for locally generated renewable energy paired with storage to provide backup power in the event of a grid outage.” In the case of customer-side-of-the-meter generation paired with storage there would be no resilience value for the associated load if the facility cannot operate in islanded mode in the event of a grid outage. Second, it is our understanding that islanding capability for a single-customer behind-the-meter system is technically quite simple, requiring only a transfer switch comparable to that used today in conjunction with back-up generators. Islanding capability for such simpler systems can and should be readily addressed in the library of single-line diagrams and templates discussed in Sec.4.1.3.

The Joint Parties recommend that the Commission adopt Proposal 1 for Tariff Modernization Problem 2 and include the requirement for islanded operation.

VII. NEEDED IMPROVEMENTS TO THE OUTREACH AND COMMUNICATION PROCESS

The Commission should require IOUs and CPUC staff to post presentations and other key meeting materials for all meetings required by the PD at least 24 hours in advance of all public meetings.

The PD orders various workshops, technical working groups and public consultations, all of which will involve presentations by the IOUs and/or CPUC staff, many of which will be

4 PD at Page 36.
technically complex.\textsuperscript{5} Over the years, the frequent unavailability of presentations until after the event has been a challenge and source of frustration for participants in CPUC and IOU meetings and workshops. Participants see often highly complex materials for the first time during the event and must struggle to simultaneously take notes on the content of the slides and engage in the discussion. Having advance access to review materials and having them on hand during the events will allow for more productive and efficient meetings.

The CPUC should therefore require, in all instances, that designated presenters post their presentations for easy access by participants (e.g., by emailing a link to the service lists) at least 24 hours in advance of the scheduled event. This should not be a burdensome requirement. Stakeholder meetings at the CAISO, many of which are highly technical and complex, have complied with 24-hour advance posting requirements for over a decade. This posting requirement should be standard procedure for all meetings ordered by this PD.

\section*{VIII. LOCAL GOVERNMENTS, COMMUNITY CHOICE AGENCIES AND TRIBAL AUTHORITIES SHOULD HAVE THE OPPORTUNITY TO PROPOSE ALTERNATIVES TO UTILITY RESILIENCY PROPOSALS}

The Joint Parties have commented above about the need for robust partnerships between local and tribal governments and distribution utilities in the assessment of community needs and the identification of resiliency project opportunities. Likewise, we have highlighted the potential to apply elements of the PG&E Community Microgrid Enhancement Program to all IOU distribution utilities. We are concerned that provisions for utility consultation with tribal and local authorities may not create adequate opportunities for these entities to offer alternative project proposals and have the utilities completely and timely evaluate such alternatives.

PG&E’s CMEP proposal does explicitly allow for locally-generated resiliency projects, but there is no explicit linkage to other PD elements such as the semi-annual workshops for gathering local input on utility distribution investment and operational plans.

To illustrate the concern, Sec. 4.3.2.1 of the PD states that “Having a transparent understanding of the utilities’ planned resiliency upgrades and projects may reduce or eliminate the need for local and tribal government or CCA resiliency projects in some areas.” This is a

\textsuperscript{5} Specific instances from the PD where advance posting of presentations would be immensely helpful: Sec. 4.1.3 - utility posting of single-line interconnection templates prior to stakeholder technical meeting; Sec. 4.3.2.1 - utility semi-annual workshops with tribal and local government agencies to communicate and obtain input on proposed utility projects to minimize the use of PSPS events.
one-sided observation. The Commission should also recognize that the same “transparent understanding” may enable local and tribal authorities or CCAs to design resiliency projects that reduce or eliminate the need for utility resiliency, reliability or grid upgrade projects in some areas. Moreover, non-utility alternatives may be more cost effective and better aligned with local needs than utility proposals. To ensure that the best resiliency projects are on the table and given full consideration, the Commission should direct the utilities to initially and actively engage with local and tribal governments to evaluate locally-proposed alternatives to determine the best solutions to local resiliency needs or to substitute such solutions for upgrades proposed by the utility.

IX. SDG&E’S PROPOSED LOCAL AREA DISTRIBUTION CONTROLLER SHOULD NOT BE APPROVED

The Joint Parties are concerned with the proposed approval of the PXiSE Local Area Distribution Controller (LADC) and SDG&E directly procuring systems and equipment from one of its affiliates. Even if all the Affiliate Transaction Rules were followed, the decision to allow SDG&E to procure from its own affiliate sets an anticompetitive precedent. If an IOU issues a solicitation, its own affiliate should not be permitted to respond because of the inherent bias toward the affiliate’s solution. This is already common practice in California. For example, in PG&E’s DGEMS RFO issued in December 2019, it expressly disallows affiliates from bidding.6 This should be the standard requirement for all IOU procurement. Based on this principle, the Commission should require SDG&E to choose another controls provider.

However, as we discussed in section II above, if the Commission does approve the LADC, it should clarify that its approval of SDG&E’s acquisition of the proprietary LADC system is separate and distinct from and does not in any way predispose Commission resolution of the question of third-party operation and control of a community microgrid.

---

6 3. Participant is not PG&E, an affiliate of PG&E, PG&E Corporation, or any of their affiliates. DGEMS RFO at Page 10.
X. CONCLUSION

The Climate Center and Vote Solar value the Commission’s leadership on the important goal of accelerating microgrid deployment, and we appreciate the opportunity to submit these comments on the PD.

Dated: May 19, 2020

Respectfully submitted,

/s/

Lorenzo Kristov, Ph.D.
Consultant to Vote Solar
PO Box 927
Davis, CA 95617
Telephone: (916) 802 7059
Email: LKristov91@gmail.com

Susannah Churchill Vote Solar
360 22nd St. Suite 730
Oakland, CA 94612
Tel: (415) 817-5065
Email: susannah@votesolar.org

W. Woodland (Woody) Hastings
Energy Program Manager
The Climate Center
PO Box 3785
Santa Rosa, CA 95402
Tel: (707) 829-3460
E-mail: woody@theclimatecenter.org
Appendix A: Changes to Findings of Fact, Conclusions of Law and Ordering Paragraphs

Findings of Fact

5. Commercializing microgrids, utilizing other resiliency technologies, and related utility activities are necessary to mitigate the negative impacts of PSPS outage events and wildfires.

9. Projects that island require longer study processes to ensure that there is no inadvertent export of energy to the grid.

10. Reducing the amount of time required to interconnect DERs including microgrids for the 2020 fire season and beyond, is likely to increase resiliency of electric service during widespread outages by allowing for islanding while maintaining the safety and reliability of the grid.

28. Local and tribal governmental collaboration with the utilities could lead to the development of additional community resiliency solutions that minimize the impact of PSPS events and lower the cost of resiliency solutions.

29. Effective outreach and communication from the utilities to local and tribal governments will foster collaborative problem solving for community resiliency planning, facilitate the ability of local and tribal governments to protect the safety, quality of life and health of their communities, and support equitable access to utility information across local and tribal governments, and may reveal locally-generated solutions that are more cost-effective than the utility proposals.

30. A utility resiliency project engagement guide and ongoing programmatic support may assist local and tribal governments in development of successful microgrid projects.

31. Adding additional utility staff to utility distribution planning teams that specialize in resiliency project development for local jurisdictions could help local and tribal governments identify, plan and deploy community resiliency microgrids.

32. Creating and coordinating the use of a separate access-restricted portal(s), available
only to local and tribal governments and shared with developers, property owners and customers as appropriate, containing essential data for identification of microgrid development opportunities, may support community resiliency projects and planning and development.

35. PG&E’s Community Microgrid Enabled Program may help community proposed microgrids to enhance resiliency for critical facilities and vulnerable populations but delegating responsibility to the utility for creating community microgrid tariffs is not justified.

36. Local and Tribal governments served by Southern California Edison and San Diego Gas and Electric could also benefit from a similar Community Microgrid Enabled Program.

37. SDG&E complied with the Affiliate Transaction Rules, which assures the Commission that its affiliates did not gain an unfair advantage over other market participants in the selection of the affiliate’s LADC and San Diego ratepayers are not subsidizing unregulated activities. However, SDG&E’s affiliate may still enjoy an anti-competitive market advantage by the ratebasing of its LADC.

Conclusions of Law

14. It is reasonable to require PG&E, SCE, and SDG&E to accelerate interconnection for key locations, customers, and/or facilities by requiring the utilities to increase staff resources and information technology resources to their interconnection study and distribution upgrade teams, in order to facilitate faster queue processing for all projects. It is reasonable for PG&E, SCE, and SDG&E to provide expedited interconnection schedules associated with the increased staffing.

22. It is reasonable to require PG&E, SCE, and SDG&E to modify their NEM tariffs to remove the storage sizing limit for large NEM-paired storage, allow for islanded operation and maintain existing metering requirements.

23. It is reasonable to require PG&E, SCE, and SDG&E, within 30 days of the date of issuance of this decision, each to submit a Tier 2 Advice Letters proposing the necessary modifications to their NEM tariffs to make the changes that remove the storage sizing
limit for large NEM-paired storage, allow for islanded operation and maintain existing metering requirements. Such Advice Letters shall be served on current and prior NEM proceeding Service Lists.

26. It is reasonable to require PG&E, SCE, and SDG&E, to each submit Tier 2 Advice Letters within 30 days of the date of issuance of this decision, that explains their plans to conduct semi-annual workshops designed to effect the following:
(a) Designation of utility/local and tribal government interface roles and responsibilities;
(b) Engagement with local and tribal governments to build and sustain effective relationships;
(c) Establishing and maintaining open, accurate, and consistent lines of communication with local and tribal governments;
(d) Including local and tribal government input in planning and vetting of utility actions that are anticipated to impact local and tribal government concerns;
(e) Consider and evaluate opportunities for resiliency improvements and community microgrid projects identified by local and tribal governments and by community choice agencies.
(f) Executing agreements impacting local and tribal governments;
(g) Describing draft agendas for local and tribal government engagement meetings that include education about, at a minimum, how the electric transmission system and distribution system operates in the area, local grid topology and circuit configuration, electric transmission and distribution infrastructure investment and operational plans, weather and climatology analysis predictions for future PSPS events, predictive scenarios, and a reflection on local and tribal government input.

28. It is reasonable to require PG&E, SCE, SDG&E to develop a resiliency project engagement guide and provide ongoing programmatic support to help local and tribal governments navigate the utilities’ interconnection processes for design and deployment of a resiliency project that includes, but is not limited to:

32. It is reasonable to require PG&E, SCE, and SDG&E each to develop a separate access-restricted portal(s), available only to local and tribal governments which may be shared with project developers, property owners and consumers as appropriate containing essential data to identify in front of the meter microgrid development opportunities that may support community resiliency projects and planning.

33. It is reasonable to require PG&E, SCE, and SDG&E to each submit Tier 2 Advice
Letters that describe their plan for developing a separate, access-restricted data portal(s) for sharing information with local and tribal governments which may be shared with project developers, property owner and consumers as appropriate.

40. It is reasonable to approve PG&E’s Community Microgrid Enablement Program for enhanced resiliency for critical facilities and customer groups for all areas prone to outage events through 2020-2022, but excluding creation of community microgrid tariffs. The delegation of responsibility for creating community microgrid tariffs is not a reasonable delegation of the Commission’s authority.

41. It is reasonable to require PG&E, within 60 days of the date of issuance of this decision, to submit a Tier 2 Advice Letter that includes the Community Microgrid Enablement Program implementation plan regarding the program scope, project applicability and eligibility criteria as directed in Section 5.1.2 of this decision. The implementation plan will not include creation of community microgrid tariffs.

43. It is not reasonable to conditionally approve SDG&E’s Local Area Distribution Controller (LADC) project because it would grant unreasonable long-term market advantages to SDG&E’s affiliate, subject to future audit to assure adherence to contract timelines and contracted terms, including compensation rates.

44. It is reasonable to direct SDG&E to submit a Tier 2 Advice Letter within 30 days of the date of issuance of this decision, demonstrating progress on the LADC project, including:
   (a) Adherence to Task Milestone schedule;
   (b) Target Dates for completion of each task; and
   (c) Any deviations from contracted compensation schedule included in the contract submitted to Staff.

48. It is reasonable for PG&E, SCE and SDG&E as well as CPUC staff to make available technical materials and presentations at least 24 hours in advance of workshops and technical meetings related to this proceeding for participants to review.

**Ordering Paragraphs**

6. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall each submit a Tier 2
Advice Letter within 30 days of the date of issuance of this decision, that propose necessary modifications, in compliance with Section 4.2.3 of this decision, to their Net Energy Metering (NEM) tariffs that remove the storage sizing limit for large NEM-paired storage, allow for islanded operation while maintaining existing metering requirements. In this Advice Letter submittal, PG&E, SCE, and SDG&E shall reference compliance with this decision pursuant to Ordering Paragraph 6.

7. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall each submit a Tier 2 Advice Letter within 30 days of the date of issuance of this decision, that document their plans to conduct semi-annual workshops designed to help empower local and tribal jurisdictions with a better understanding of grid operations, utility infrastructure, and the nature of weather events alongside utilities’ Public Safety Power Shutoff (PSPS) mitigation initiatives in order to make informed decisions on where Local and Tribal government may focus their resiliency planning efforts, and review proposed utility capital investments, and pre-PSPS event operations consistent with Section 4.3.2.1 of this decision. This Advice Letter should specifically address how the utilities plan to develop and ensure that effective internal communication processes exist for managing interface with local and tribal government by enumerating how they will achieve the outcomes below:
   a) Designating utility interface roles and responsibilities;
   b) Managing engagement with local and tribal government and building and sustaining effective relationships;
   c) Establishing and maintaining open, accurate, and consistent lines of communication;
   d) Involving local and tribal government in planning and vetting of utility actions impacting local and tribal government;
   e) actively soliciting local and tribal government proposals for resiliency improvement and microgrid project development and
   ef) Executing agreements impacting local and tribal governments.

9. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall each submit a Tier 2 Advice Letter within 30 days of the date of issuance of this decision, showing how they plan to develop a resiliency project engagement guide and ongoing programmatic support consistent with Section 4.3.3.1 of this decision.

11. Pacific Gas and Electric Company (PG&E), Southern California Edison Company
(SCE), and San Diego Gas & Electric Company (SDG&E) shall each submit Tier 2 Advice Letters within 30 days of the date of issuance of this decision, providing their plan for developing a separate, access-restricted data portal(s) for sharing information with local and tribal governments which may be shared with project developers, property owners and consumers as appropriate. This Advice Letter shall include, at a minimum: (1) a work plan and budget estimate for developing a data portal that provides appropriate information and meets the requirements listed in section 4.3.5.1 of this decision; and (2) a narrative description of how the work plan relates to any other planned work on related systems. The work plan shall include a list of tasks, a schedule for each task, any interdependencies among tasks, and key milestones. These Advice Letters shall demonstrate compliance with Section 4.3.5.1 of this decision.

19. Pacific Gas and Electric Company (PG&E) shall submit a Tier 2 Advice Letter, within 60 days of the date of issuance of this decision, that includes Community Microgrid Enablement Program implementation details regarding the program scope, project applicability and eligibility criteria including, but not limited to the requirements listed in Section 5.1.2 of this decision. PG&E shall not include in this Advice Letter recommendations on the implementation of Community Microgrid Tariffs. In this Advice Letter submittal, PG&E shall reference compliance with this decision pursuant to Ordering Paragraph 19.

20. San Diego Gas & Electric Company (SDG&E) shall submit a Tier 2 Advice Letter within 30 days of the date of issuance of this decision disclosing final contractual terms related to its proposed acquisition of a Local Area Distribution Controller project Task Milestone schedule, Target Dates for completion of each task. In this Advice Letter submittal, SDG&E shall reference compliance with this decision pursuant to Ordering Paragraph 21.