Resiliency & Microgrids Working Group Multi Property Tariff Phase: Community Microgrid Enablement Tariff

Resiliency and Microgrids Team, Energy Division April 13, 2021



WebEx and Call-In Information

Join by Computer:

https://cpuc.webex.com/cpuc/onstage/g.php?MTID=eea29ac3e12f4d713b9c7a7aaa62619d0 Event Password: RMWG

Join by Phone:

• Please register using WebEx link to view phone number. (Staff recommends using your computer's audio if possible.)

Notes:

- Today's presentations are available in the meeting invite (follow link above) and will be available shortly after the meeting on https://www.cpuc.ca.gov/resiliencyandmicrogrids.
- This meeting will not be recorded and there will not be meeting minutes.

WebEx Logistics

- All attendees are muted on entry by default.
- Questions can be asked verbally during Q&A segments using the "raise hand" function.
 - The host will unmute you during Q&A portions and you will have a maximum of 2 minutes to ask your question.
 - Please lower your hand after you've asked your question.
 - If you have another question, please "reraise your hand" by clicking on the "raise hand" button twice.
- Questions can also be written in the Q&A box and will be answered verbally during Q&A

WebEx Tip

1. Click here to access the attendee list to raise and lower your hand.

2. Raise your hand by clicking the hand icon.

3. Lower it by clicking again.



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Participants



L' Snare

Unmute

Access your meeting audio settings here

WebEx Event Materials



Agenda

- I. Introductions
 - WebEx Logistics
 - Review agenda
- II. Community Microgrid Enablement Tariff
 - Answer questions on how the CMET can address requirements of the pilot project.
 - Discuss how the CMET model applies to multi customer microgrids more generally, and highlight future topics still requiring exploration.
 - Questions will cover topics such as participation in wholesale markets, operational coordination, consumer protection, financial compensation, and socialized costs.
 *Clarifications Q&A after each sub-topic

III. Discussion

2:05 - 3:55

Panelists



Dana Boudreau Operations Director Redwood Coast Energy Authority



Jeremy Donnell Microgrid Policy and Pricing Strategy Pacific Gas and Electric

Redwood Coast Airport Project Summary

- First front-of-meter, multi-customer microgrid on PG&E's system (PV array and battery storage) with microgrid controllers
- Partnership between an IOU and a CCA
- CCA will own and operate DERs that will form the islanded microgrid on IOU's distribution circuit
- Grid-connected Mode RCEA (3rd party) will control generation asset, participate in wholesale market: energy arbitrage
- Islanded Mode PG&E as distribution system operator (DSO) will control generation asset

Microgrid Interactions with the Wholesale Markets

- 1. What are the opportunities for the resources within a multi-property microgrid to earn revenue under CMET? Are any of these opportunities in conflict with each other?
- 2. Under CMET, can the resources within a multi-property microgrid participate in day ahead market bidding and/or scheduling in the wholesale market (e.g., wholesale energy, resource adequacy obligations) or advanced commitment of capacity (e.g. demand response programs)?
- 3. Under CMET, how can the resources within a microgrid project obtain payments for providing local, flexible, and system resource adequacy? Would the process differ from any other type of resource seeking a buyer in the resource adequacy markets?

Microgrid Interactions with the Wholesale Markets Cont.

4. Under CMET, what are the conditions under which a multi-property microgrid would enter island mode? Who controls the decision to enter island mode, or is it automatic? Are there any policies or rules related to other revenue sources that would interfere with islanding, or that islanding would interfere with?

- For example, assume a CMET microgrid includes a resource with an RA contract. If a utility calls PSPS event that islands the microgrid, how would that affect the revenue or liability associated with that RA contract?
- How is this similar to or different from the effect of PSPS events on other RA resources that are not part of a microgrid?

Advance Notification of Emergency Events or Need to Enter Islanding Mode

- 1. Under CMET, does the PG&E have an obligation to provide advance notice of impending emergency events or islanded mode, so that microgrid operators can adjust their commitments to grid servicers appropriately? How is this similar to or different from obligations to other resources that are not part of a microgrid?
- 2. What advanced notice does can PG&E provide to allow for full charging of microgrid energy storage systems prior to an emergency event or islanded mode? Does this vary by the type of event?

Operational Security and Safety

- 1. How is fire ignition risk mitigated in a multi-property microgrid under CMET?
- 2. A primary safety concern is the possibility of back-feed from one customer premise to another and then back onto the distribution system. Does CMET allow for power to go from one premise to another without passing through the utility distribution system?
- 3. To ensure the safety of personnel and the public, can you describe the functional and physical requirements and labeling to ensuring safe connection and disconnection of microgrids under CMET?
- 4. How will energization of behind-the-meter overhead infrastructure be prevented during adverse weather conditions that pose an unacceptable risk of igniting fires (contact with other conductors, contact with wind-blown debris) or other issues (such as compromised safety and damages from falling conductor/poles)?

Consumer Protection

- 1. How will a CMET customer be assured of a reasonable level of reliability during islanded conditions?
- 2. Are there peer-to-peer transactions as part of the intended microgrid operation under the CMET? If so, how can customers be assured that that energy charges set by other customers within the microgrid, are just and reasonable?
- 3. Can existing customers within the microgrid/CMET opt out later by declining to participate in the microgrid services?
- 4. Does CMET encompass the possibility of overhead electrical infrastructure behind the meter?

Finances and Compensation

- 1. Under CMET, what mechanisms are in place to ensure that costs do not shift from participating to non-participating customers?
- 2. Under CMET, are utility ratepayers providing compensation? If so, how is it calculated?

Change Management

1. How does CMET contemplate how to integrate additional generation and manage for load growth during the operational term?

Socializing Costs for Microgrids That Serve a Public Good

Customer sited microgrids typically involve costs that trigger distribution system upgrades that are normally the responsibility of the customer requesting the upgrade.

- 1. If a multi-property microgrid serves several critical facilities that serve a public good (e.g., police station, fire station, community resources center, etc.), who should cover the required grid upgrades to enable the microgrid? Should it be the local government or community, or ratepayers as a whole? How does CMET answer this question?
- 2. Should there be exemptions from various cost responsibility surcharges for multi-customer microgrids who serve a public good? Does CMET include exemptions?

Discussion and Q&A



Questions for Members

Now that you heard all this and how it works:

- What do you think?
- What do you like about it?
- What do you not like about it?

Upcoming Meetings

- Monday, April 19, 2021, 2-4PM
 Topic: Member Proposal Presentations from Green Power Institute and Microgrid Resources Coalition
- Monday, April 26, 2021, 2-4PM
 Topic: Member Proposal Presentation from Applied Medical Resources Corporation

For more information:

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