

Microgrid Services Tariff (MST) Phase 2: Working Group Meeting #4

Docket 2018-0163

July 12, 2022



**Hawaiian Electric
Maui Electric
Hawai'i Electric Light**

Agenda

- 2:00-2:05 Review of Objectives & Ground Rules
- 2:05-2:15 Recap of Priority Issues Discussed / Guidance Letter
- 2:15-3:00 Discussion of Priority Issues Table (Outline for Final Report)
- 3:00-3:05 BREAK
- 3:05-3:20 Discussion of Priority Issues Table (cont.)
- 3:20-3:35 Update Work Plan / Guest Speaker Planning
- 3:35-3:50 Prep for July 28 Status Conference
- 3:50-4:00 Schedule next Working Group Meeting

Objectives

PUC Phase 2 Objectives:

1. Continue development of the Tariff
 - ❖ Promote self-sufficiency and resiliency among microgrid project operators
 - ❖ Streamline MST
2. Enhance Tariff to support broader use of microgrids in non-emergency situations
 - ❖ At minimum, enable voluntary islanding
3. Further explore opportunities to support resilience through microgrid development
 - ❖ Encourage development of microgrids that can provide power to remote communities and critical facilities such as schools, shelters, and hospitals
4. Identify grid services that can be provided by microgrids
 - ❖ Explore ways related exchanges between the utilities and microgrid operators could happen

Working Group Objectives (not in order of priority – will be discussed at future working group meetings):

1. Coordinate and align with other Dockets to leverage resources and streamline efforts
2. Focus on resiliency
 - ❖ Microgrids and/or other tools/programs
 - ❖ “Low-hanging” fruit, with such considerations as Act 200 goals, practical implementation, “real-world” goals, technical, costs, etc.
3. Understand how the tariff could support microgrid operations in non-emergency situations
 - ❖ Existing microgrid operations
4. Keep costs to all customers in mind (cost equity)
 - ❖ Compensation (e.g., rates, standby rates, exit fees, etc.)
5. Encourage development of grid services

Ground Rules

- ◆ Members will maintain an open mind and be respectful of all views
- ◆ Members will review meeting agenda in advance and complete any pre-reads prior to the meeting
- ◆ Discussion will be kept on agenda topic

Recap of Priority Issues Discussed

Meeting / Deadline	Date	Priority Issues
WG Mtg #1	Friday, April 29, 2022	<ul style="list-style-type: none"> • Confirm WG Objectives, Schedule, & Participants • Discuss High Level Work Plan
Status Conference	Thursday, May 5, 2022	
WG Mtg #2	Tuesday, May 17, 2022	<ul style="list-style-type: none"> • Discuss Ground Rules and WG Participant Responsibilities • <i>Working group coordination with related microgrid and resilience initiatives at Hawaiian Electric and government agencies (see slide 14)</i> • <i>Better understanding barriers to microgrid development and what would make the microgrid tariff more attractive for developers (Guest speakers from Ameresco and Holu Hou)</i> • Discuss how to prioritize issues
WG Mtg #3	Thursday, June 16, 2022	<ul style="list-style-type: none"> • <i>Resilience services and compensation, including societal and environmental value, to inform development of a resilience tariff (Guest speaker from DOE)</i> • <i>Identifying community needs (Guest speaker from NREL re: ETIPP)</i> • <i>Customer education and outreach (Guest speaker from NREL re: ETIPP)</i>

June 30 Guidance Letter

- ◆ Prioritized discussions by 1) Third-party operated Hybrid MGs (listed NELHA as example), 2) Utility operated Hybrid MGs, and 3) Customer MGs; emphasized discussions should cover all three types
 - Drafted Priority Issues table to discuss with Working Group members and will reprioritize remaining discussions
 - Reached out to NELHA to share microgrid project updates, will be a guest speaker in a future meeting
- ◆ Reiterated expectations for discussion on Microgrid Compensation and continued outreach and participation of Microgrid Developers
 - Reached out to Enchanted Rock, will be a guest speaker in a future meeting

Draft Priority Issues Table by MG Type

Order No. 38293 Priority Issues	Hybrid – 3 rd Party Developer as MG Operator	Hybrid – Utility as MG Operator	Customer MG
<p>MG Compensation / Grid Services</p> <ul style="list-style-type: none"> a. Harmonization with other programs' grid services mechanisms b. Customers with existing DER/DR grid service agreements c. Resilience services and compensation, including societal and environmental value, to inform development of a resilience tariff <p>Utility Compensation (standby charges, exit fees, and/or other charges)</p> <p>Customer Protection and Related Considerations</p>	<p>Customers of 3rd party MG developer – current compensation available through DER programs (CGS, CGS+, Smart Export, SDP, BYOD) and compensation through aggregator (Grid Services RFP) during non-islanding mode</p> <p>3rd party MG developer – current compensation available through DER programs (CGS, CGS+, Smart Export, SDP, BYOD) and compensation through aggregator (Grid Services RFP) during islanding mode</p> <p>Discussion points (re: voluntary islanding):</p> <ul style="list-style-type: none"> - Technical - MG Compensation (other than above, resiliency for islanding during emergency situations) - Utility Compensation (compensation, standby charges, exit fees, and/or other charges) - Whether certain configurations or structures may result in the MG operator being a utility - Cost equity (participating vs non-participating customers) <p><i>Note: Phase 1 provided framework for compensation to MG operator during emergency islanding (HECO retaining billing at tariff rates)</i></p>	<p>TBD</p>	<p>Current compensation available through DER programs (CGS, CGS+, Smart Export, SDP, BYOD) and compensation through aggregator (Grid Services RFP) during non-islanding mode</p>

Draft Priority Issues Table by MG Type (cont.)

Order No. 38293 Priority Issues	Hybrid – 3 rd Party Developer as MG Operator	Hybrid – Utility as MG Operator	Customer MG
Interconnection	Utilize 14H / standard interconnection process (IXC docket 2021-0024)	Utilize 14H / standard interconnection process (IXC docket 2021-0024)	Utilize 14H / standard interconnection process (IXC docket 2021-0024)
WG Coordination w/related MG and resilience initiatives at HE and government agencies: Identifying critical facilities / community needs	ETIPP / IGP RWG	ETIPP / IGP RWG	N/A
WG Coordination: Identifying funding mechanisms	Developer financing + utility /fed/state funding sources	IPF (Innovation Pilot Framework) or additional grants (i.e. Fed infrastructure bill)	Developer financing
WG Coordination: Customer education / outreach; better understanding barriers to development	ETIPP; HECO would coordinate with developer to educate customers	HECO would coordinate with developer to educate customers	DER Docket

BREAK
(5 min)



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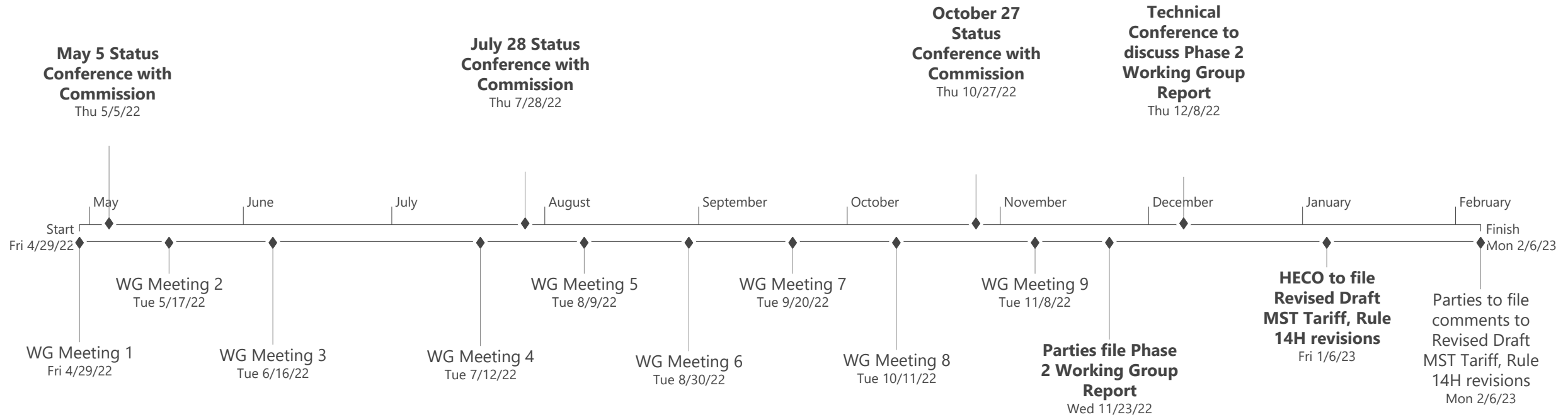
High Level Work Plan to Address Priority Issues

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WG Mtg #1	Friday, April 29, 2022	<ul style="list-style-type: none"> • Confirm WG Objectives, Schedule, & Participants • Discuss High Level Work Plan
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WG Mtg #2	Tuesday, May 17, 2022	<ul style="list-style-type: none"> • Discuss Ground Rules and WG Participant Responsibilities • <i>Working group coordination with related microgrid and resilience initiatives at Hawaiian Electric and government agencies (see Appendix)</i> • <i>Better understanding barriers to microgrid development and what would make the microgrid tariff more attractive for developers (Guest speakers from Ameresco and Holu Hou)</i> • Discuss how to prioritize issues
WG Mtg #3	Thursday, June 16, 2022	<ul style="list-style-type: none"> • <i>Resilience services and compensation, including societal and environmental value, to inform development of a resilience tariff (Guest speaker from DOE)</i> • <i>Identifying community needs (Guest speaker from NREL re: ETIPP)</i> • <i>Customer education and outreach (Guest speaker from NREL re: ETIPP)</i>
WG Mtg #4	Tuesday, July 12, 2022	<ul style="list-style-type: none"> • Discuss how to organize report (draft Priority Issues table) • <i>Harmonization with other programs' grid services mechanisms</i> • <i>Customers with existing DER/DR grid service agreements</i> • <i>Customer Protection and Related Considerations</i> • <i>Interconnection</i> • <i>Identifying a variety of funding mechanisms for microgrid development. Including possible state and federal funds that can be leveraged to support pilots and/or demonstration projects</i> • <i>MG Compensation and Grid Services</i> • <i>Utility Compensation/Standby charges, exit fees, and/or other charges</i>
Status Conference	Thursday, July 28, 2022	

High Level Work Plan to Address Priority Issues (cont.)

Meeting / Deadline	Date	Priority Issues
WG Mtg #5	Tuesday, August 9, 2022	<ul style="list-style-type: none"> Identifying critical facilities (Resilience Application Filing / IGP RWG Next Steps) MG Compensation and Grid Services (cont.) Utility Compensation/Standby charges, exit fees, and/or other charges (cont.)
WG Mtg #6	Tuesday, August 30, 2022	
WG Mtg #7	Tuesday, September 20, 2022	
WG Mtg #8	Tuesday, October 11, 2022	
Status Conference	Thursday, October 27, 2022	<ul style="list-style-type: none"> Discuss how to organize report Discuss tariff revisions
WG Mtg #9	Tuesday, November 8, 2022	
Parties to file Phase 2 WG Report	Wednesday, November 23, 2022	<ul style="list-style-type: none"> Discuss how to finalize report and tariff revisions
Technical Conference	Thursday, December 8, 2022	
HECO to file Revised Draft MST Tariff, Rule 14H revisions	January 6, 2023	
Parties to file comments to Revised Draft MST Tariff, Rule 14H revisions	February 6, 2023	

Timeline



Mahalo/Appendix



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Phase 2 Priority Issues

1. Microgrid Compensation and Grid Services

- a. Harmonization with other programs' grid services mechanisms
- b. Customers with existing DER/DR grid service agreements
- c. Resilience services and compensation, including societal and environmental value, to inform development of a resilience tariff

2. Utility Compensation

- a. Standby charges, exit fees, and/or other charges

3. Customer Protection and Related Considerations

4. Interconnection

5. Working group coordination with related microgrid and resilience initiatives at Hawaiian Electric and government agencies

- a. Identifying critical facilities
- b. Identifying a variety of funding mechanisms for microgrid development. Including possible state and federal funds that can be leveraged to support pilots and/or demonstration projects
- c. Identifying community needs
- d. Better understanding barriers to microgrid development (e.g., economic, project opportunities, technical expertise) and what would make the microgrid tariff more attractive for developers
- e. Customer education and outreach

Coordination with Related Dockets/Initiatives

Docket/Project	Docket #	Hawaiian Electric POC	Next Step	Timing
DER Docket: Smart DER Tariff	2019-0323	Kaiulani Shinsato	Smart DER Tariff to replace SIA, CGS+, CSS programs	July 2023
DER Docket: Advanced Rate Design (ADR) & Time-of-Use (TOU)	2019-0323	Peter Young	Pending PUC ruling on ADR	Pending PUC D&O
DER Docket: BYOD with Compensation	2019-0323	Yoh Kawanami	BYOD proposal submitted to Commission on 4/19/22	Pending PUC D&O; tentative program launch July 2023
RFP for Grid Services (Hawaii)	2017-0352	Yoh Kawanami	Grid Services component separated from Stage 3 all resource procurement for Hawaii island. GS RFP will follow after Stage 3.	2024?
RFP for Grid Services (Maui)	TBD	Yoh Kawanami	Draft RFP for Grid Services to be filed to Commission 6/30/22	Q3 2022
Integrated Grid Planning Resilience Working Group (IGP RWG)	2018-0165	Marc Asano	Oahu Grid Needs Assessment	Pending PUC D&O
Performance-based Ratemaking (PBR)	2018-0088			
Interconnection (IXC)	2021-0024			
Climate Adaptation Transmission and Distribution Resilience Program Application	N/A	Riley Ceria Kahikina Burgess	Application filed on June 30, 2022	Pending PUC D&O
Energy Transitions Initiative Partnership Project (ETIPP)	N/A	Ken Aramaki Marc Asano	National Labs drafting map of potential hybrid microgrid sites	July 2022