



Meeting Name	Date of Meeting
Microgrid Services Tariff Working Group Meeting	January 11, 2021

Agenda

<p>Introduction and Action Item List (Slides 1-3)</p>	<ul style="list-style-type: none"> • WG Lead reviewed progress on past action items. <ul style="list-style-type: none"> ○ Action Items 2-4 (discussed Jan. 5) are still “open”. WG Lead (K. Aramaki) working with MRC directly to work towards resolution. Proposed changes to be sent to WG if agreement made or input needed. ○ Action Item 9 (anti-islanding provision) considered “closed”. ○ Action Item 10a updated to reflect plan to do a walk-through of MRC’s (and others) walk-through of the Interconnection Agreement. • Focus of Jan. 11 meeting was to discuss highlighted action items 5, 6, 10b, 10c, and 11.
<p>Data set for feasibility analysis (Slides 4-6)</p>	<ul style="list-style-type: none"> • Commission requested a checklist to standardize data requirements for a feasibility study. • HECO clarified the Interconnection Agreement, Exhibit A included most of the information needed to commence the feasibility study, but proposed a few additional requirements: <ul style="list-style-type: none"> ○ Map showing defined electrical boundaries ○ Identification of nearest protective devices on the customer side ○ (if available) the generator’s reactive capability curve • Action Item: Commission to provide feedback on proposed changes
<p>MRC & Ulupono proposed Hybrid MG Compensation (Slides 7-13)</p>	<ul style="list-style-type: none"> • MRC (B. Baird) and Ulupono’s (G. Sumida) understood prior to the Commission’s letter (dtd. 12/20/20) was that alternative compensation concepts (i.e., leasing) was off the table. Alternative proposals were being presented to meet the letter’s request by the Commission. <ul style="list-style-type: none"> ○ MRC/Ulupono did not object to “Draft Tariff Model” but offering other alternative compensation models to include in the tariff and to identify and delineate differences between the models. • MRC stated the “Draft Tariff Model” (currently included in draft tariff) did not leave much incentive for anyone to develop a hybrid MG. • MRC and Ulupono presented two alternatives, “Community Solar Model” and “Customer Microgrid Model”. <ul style="list-style-type: none"> ○ Community Solar Model <ul style="list-style-type: none"> ▪ Model is based on Community Solar, and similar to “Draft Tariff Model” ▪ Energy generated by resources within the MG are compensated at the amount set by the MGO, and is equal to the amount



participants pay for this energy. Energy “imported” by the utility into the MG will be compensated at retail rates.

- Customer MG Model
 - Ulupono suggested the Customer MG Model may not need a standard interconnection agreement included in the tariff, as the projects and terms would be negotiated between developer (MGO) and the Company (HECO).
- MRC and Ulupono explained that Hybrid MG developers would not be signing up many (i.e., 100) residential homes, but most likely will develop a MG with few large commercial participants. Using this context, MRC/Ulupono suggested:
 - Opt in/opt out issues (as raised by a WG member) would not be an issue for the Hybrid MG. The issues raised were 1) free rider participants, 2) isolation of customers opting out, 3) availability of energy during islanding with free rider participants.
 - CA look into developing two types of disclosure checklists, one (more comprehensive set) for residential participants and another (less prescriptive set) for commercial customers.
- MRC and Ulupono acknowledge there are more things to work out with the WG in the two compensation proposals.
- CA asked the following:
 - Hybrid MG quality of service. How are participants protected and the level of service quality? For the Utility, service quality levels are included in the tariff.
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 - If a hybrid MGO wants to be considered a utility. MRC and Ulupono confirmed hybrid MGOs do not intend to become public utilities.
 - The MG Tariff does not change what is written in Hawaii Law and Statute.
 - Additional thought and discussion should be considered on this question if proposed compensation concepts are to be considered.
 - Items identified above, in addition to items regarding the compensation, (e.g., customer disclosure, information to customer regarding service quality should be addressed with the two compensation proposals.
- HECO provided the following feedback for the Commission’s consideration:
 - The proposed changes were not fully discussed, vetted, and thought through by the WG members. The two new hybrid microgrid models raise a number of issues that merit further detailed discussion and possible changes that are likely not feasible at this point in the proceeding. Inclusion of these two new hybrid models in this current



	<p>phase of the tariff proceeding may have unintended consequences. Propose to examine further in a future phase of this proceeding.</p> <ul style="list-style-type: none"> ○ Compensation within the two proposed concepts should be considered with other proceedings (i.e., DER tariff), as the proposal is for the MGO to set the price for compensation. Note that the draft tariff allows for inclusion of fossil-fuel generation in the MG (intended for resilience purposes). ○ Concepts that include a joint venture with the Utility (or Utility-led MGs) were considered out of scope by the Working Group. ○ The proposed compensation models can already be accomplished without a tariff as they are likely to be done by sophisticated parties, with unique projects that would have independent negotiations on a number of points, subject to Commission approval. ○ Concepts appear counter to the goals of streamlining and simplifying the tariff. <ul style="list-style-type: none"> ● Action Item: Commission to provide further guidance.
<p>Hybrid MGO Interconnection Agreement (Slides 14-18)</p>	<ul style="list-style-type: none"> ● HECO provided its proposals to address action item 10B. <ul style="list-style-type: none"> ○ Proposal was to remove phone line requirement in Exhibit B, Sec. 1.d.i.B.) <ul style="list-style-type: none"> ▪ No objections by the WG. ○ HECO provided a revision to Exhibit B, Sec. 2.c., which included language to clarify Ramp Rate requirements. <ul style="list-style-type: none"> ▪ Action Item: Commission to provide feedback. ● Action Item 10c: <ul style="list-style-type: none"> ○ Action Item: CA working on Disclosure Checklist Revision. Will be sent to WG for review. <ul style="list-style-type: none"> ▪ CA requested Commission guidance on Hybrid MG compensation to consider in revision of checklist. ○ HECO and CA reiterated support of a disclosure checklist. ○ WG members were asked, and did not provide any opposition to having a disclosure checklist. Some thoughts offered from WG members are to develop different disclosure checklists for different customers (e.g., commercial, residential customers, recognizing that there may be a difference with small commercial customers).
<p>Draft Modifications to Rule 24 and other DER Programs (Slides 19-21)</p>	<ul style="list-style-type: none"> ● MRC requested the following changes to the Commission’s redlines: <ul style="list-style-type: none"> ○ Section F.3 (add bold text): <ul style="list-style-type: none"> ▪ “...Generating Facility as part of a Customer Microgrid or...” ○ Section F.5 (add bold text): <ul style="list-style-type: none"> ▪ “...Generating Facility as part of a Microgrid after...”



	<ul style="list-style-type: none"> • Action Item: WG Lead (K. Aramaki) to include revisions and send draft of all DER tariffs with Commission’s redlines for WG review.
Next Steps (Slide 22-25)	<ul style="list-style-type: none"> • Meetings scheduled Jan. 14 and 20 • WG Lead (K. Aramaki) will send draft Hybrid MGO Interconnection Agreement to WG in preparation for the walk-through on Jan. 14.
Working Group Parking Lot (Added for reference)	<ul style="list-style-type: none"> • Change of ownership of Microgrid • Standby Charges or Exit Fees • Customer protection-related considerations • Microgrid/IGP procurement considerations • Considerations of gaming between utility-owned and 3rd-party MGs • Army/Military MG issues such as WG will consider nested microgrids, if appropriate • Interactions with other dockets <ul style="list-style-type: none"> ○ DER Tariff/Programs ○ IGP Resiliency • Consideration of societal, environmental value • Development of PPA model for hybrid MGs • Other types of microgrids that don’t fit Act 200 definition • Gap in tariff for customers greater than 100kW participation & compensation in non-normal, non-island scenarios. Eg, SIA • Harmonize compensation with other grid service mechanisms <ul style="list-style-type: none"> ○ Expanded functionality from MG service and whether should be included in MST. • Contractual obligations for other grid services – Customers with existing DER/DR obligations still need to meet performance if included in a MG. • Customer approvals – Does a Hybrid MG need a full customer subscription? • Resiliency Tariff • Retail wheeling (see January 16, 2020 Commission Guidance Letter) • Compensation While Grid Connected (see January 16, 2020 Commission Guidance Letter)

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Attendees:

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