



Meeting Name	Date of Meeting
Microgrid Services Tariff Working Group Meeting	December 3, 2019

Agenda

<p>Introduction / Nov. 21 WG Meeting Review</p>	<ul style="list-style-type: none"> • (Slide 4) WG members in agreement with current definitions of “Customer” and “Hybrid” Microgrids. • (Slide 5) WG members provide concern in addressing non-performance of MG grid service. • WG Members made the following comments: <ul style="list-style-type: none"> ○ Gap exists for export of energy for projects between 100 kW and 5MW. 100KW and below covered by existing programs, and 5MW and above covered by proposed procurements (PPA, Grid Svcs PPA). <ul style="list-style-type: none"> ▪ WG Leads noted the focus of the Working Group is to enable microgrids that are able to island during emergency situations or grid outages. ○ Tariff should include compensation for grid services. <ul style="list-style-type: none"> ▪ WG Leads noted these are to be covered in future procurements and programs. Microgrids will be able to participate in these future programs if they meet the availability requirements. ▪ Other WG members provided feedback that deferring service requirements is ok.
<p>Presentation – Puerto Rico Update, Jorge Camcho</p>	<ul style="list-style-type: none"> • Puerto Rico’s “Hybrid MG” is defined as a combination of Renewable and CHP resources. Puerto Rico’s current regulations do not allow for the purchase or lease of utility facilities for integration in a non-utility MG arrangement. • Puerto Rico’s grid has frequency stability issues, so DGs greater than 1MW have stringent ramp rate requirements.
<p>Hybrid Microgrid – Simplified Tariff Concept</p>	<ul style="list-style-type: none"> • WG Leads presented a simplified concept to address compensation for Hybrid Microgrids. <ul style="list-style-type: none"> ○ (Slide 14) Arrows show transactions (not flow of energy). ○ WG member (B. Brown) will provide additional concepts for WG to consider. ○ WG members suggested to prioritize Hybrid MG based on market interest.
<p>Hybrid Microgrid – Interconnection /Tariff Considerations</p>	<ul style="list-style-type: none"> • WG members proposed the following: <ul style="list-style-type: none"> ○ Interconnection facilities, and thresholds (system size) should be provided by Hawaiian Electric. ○ Process should require application fee to cover a pre-approval feasibility to interconnect.



	<ul style="list-style-type: none"> ▪ Will provide developer with information to take to financiers. ▪ Feasibility would be provided prior to the completion of the Interconnection Requirements Study. ▪ Need to determine what the expectations of the feasibility study are. <ul style="list-style-type: none"> ○ WG members agreed the generator size should be used to determine tier. • WG Leads to provide draft of Tariff for WG to comment on. <ul style="list-style-type: none"> ○ WG discussed the potential for lease or agreement to use utility infrastructure. WG agreed to keep it as an option in the tariff (details not needed for the filing).
<p>Other</p>	<ul style="list-style-type: none"> • NELHA Update <ul style="list-style-type: none"> ○ NELHA originally scheduled to present at Dec. 3 meeting, but currently in procurement so unable to provide a presentation. ○ NELHA is planning to submit an SIA (non-export) to Hawaii Electric Light for their current project. Request for regulatory flexibility is not currently being planned.
<p>Next Steps</p>	<ul style="list-style-type: none"> • Next PUC Status Conference – Jan. 9 • WG Leads to distribute draft tariff and changes to existing Rules. • Meeting to be scheduled in early January to discuss draft tariff.
<p>Parking Lot Topics to Date (New Topics in Red)</p>	<ul style="list-style-type: none"> • Change of ownership • Standby Charges • 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 • Puerto Rico microgrid ruling and related activity and relevance to Hawaii • 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.



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Attendees:		
Alan Hirayama, HE	Gerald Sumida, Carlsmith/Ulupono	Rene Kamita, DCA
Alan Lee, HE	Gina Yi, Hawaii PUC	Rich Barone, HE
Anand Samtani, Hawaii PUC	Henry Lee, HE	Rick Pinkerton, HE
Andrew Barbeau, The Accelerate Group	Jay Griffin, Hawaii PUC	Riley Ceria, HELCO
Andrew Okabe, Hawaii PUC	Jorge Camacho, IEEE	Rod Aoki, RSA Law
Baird Brown, eco(n)law LLC	Kandice Kubojiri, HELCO	Russ Koehler, MCBH
Brian Levite, S&C Electric	Keith Yamanaka, USAG-HI	Samantha Ruiz, Hawaii PUC
Bryant Komo, HELCO	Ken Aramaki, HE	Shereen Wachi, NAVFAC HI
Colton Ching, HE	Leland Cockcroft, HELCO	Sonny Rasay, MCBH
Craig Nakanishi, Cades Schutte	Lisa Dangelmaier, HELCO	Steven Sano, HE
Damon Schmidt, HE	Lisa Hiraoka, DCA	Ted Robinson, USAG-HI
Darene Matsuoka, Cades Schutte	Liza Jang-Che, HE	Theodore Peck, Holu Hou Energy
David Parsons, Hawaii PUC	Marcey Chang, DCA	Tracie Black, HE
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Dennis Lee, HE	Olivia Simpson, HE	Will Rolston, Energy Island
Ellen Nashiwa, MECO	Paul De Martini, Newport Consulting	Yoh Kawanami, HE
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