BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of PUBLIC UTILITIES COMMISSION Instituting a Proceeding to Investigate Establishment of a Microgrid Services Tariff	DOCKET NO. 2018-0163

COMMENTS

of

MICROGRID RESOURCES COALITION

on

HAWAIIAN ELECTRIC'S TRANSMITTAL OF A DRAFT MICROGRID SERVICES TARIFF

and

CERTIFICATE OF SERVICE

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COMMENTS OF MICROGRID RESOURCES COALITION

TO THE HONORABLE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII:

The Microgrid Resources Coalition ("MRC") hereby respectfully submits its comments on Hawaiian Electric's Transmittal of a Draft Microgrid Services Tariff and the materials transmitted therewith submitted to the Public Utilities Commission of the State of Hawaii (the "Commission") on February 1, 2021 (the entire package of materials is hereafter referred to as the "Company Submittal", the draft Microgrid Services Tariff as the "Draft Tariff", and the proposed form of Hybrid Microgrid Agreement the "Draft Hybrid Microgrid Agreement"). The MRC submits its comments pursuant to the Commission Guidance filed December 10, 2020, in this proceeding to investigate establishment of a microgrid services tariff for Hawaiian Electric Company, Inc. ("HECO"), Hawai'i Electric Light Company, Inc. ("HELCO"), and Maui Electric Company, Limited ("MECO") (collectively, the "Company") pursuant to Act 200.[1]

[1] House Bill 2110, H.D. 2, S.D. 2, 29th Leg. Reg. Sess. (2018), was signed by the Governor and assigned Act 200 on July 10, 2018 ("Act 200") and is codified in Haw. Rev. Stat. §269-46.

I. Introduction

In passing Act 200, the Hawaii legislature expressed great enthusiasm for the potential of Microgrids and a strong intention to remove barriers to their implementation:

> Microgrids can facilitate the achievement of Hawaii's clean energy policies by enabling the integration of higher levels of renewable energy and advanced distributed energy resources. Microgrids can also provide valuable services to the public utility electricity grid, including energy storage and demand response, to support load shifting, frequency response, and voltage control, among other ancillary services.
>
> * * * *
>
> [F]ew microgrids have been developed, as their development has been inhibited by a number of factors, including interconnection barriers and a lack of standard terms regarding the value of services exchanged between the microgrid operator and the utility.
>
> * * * *
>
> The purpose of this Act is to encourage and facilitate the development and use of microgrids through the establishment of a standard microgrid services tariff.[2]

The specific requirements of Act 200 are clear:

> **§269-46 Microgrids** (a) By July 1, 2018, the public utilities commission shall open a proceeding to establish a microgrid services tariff.
>
> (b) Any person or entity may own or operate an eligible microgrid project or projects; provided that the person or entity complies with all applicable statutes, rules, tariffs, and orders governing the ownership and interconnection of the project or projects.
>
> (c) As used in this section:
>
> * * * *
>
> "Microgrid services tariff" means a tariff approved by the public utilities commission that:
>
> (i) Is designed to provide fair compensation for electricity, electric grid

[2] Act 200, Section 1.

services, and other benefits provided to, or by, the electric utility, the person or entity operating the microgrid, and other ratepayers;

(ii) To the extent possible, standardizes and streamlines the related interconnection processes for microgrid projects;

* * * *[3]

While we agree with statements in the Company Submittal that the working group has made amicable progress on certain narrow matters, that only underlines the overall lack of progress in meeting the requirements of Act 200. In our discussion below we first address the specific open items identified in the Company Submittal, and then discuss the areas of unfinished work.

II. Open Issues in the Company Submittal.

A. Microgrid Services Tariff

1. Sec. B.4: Availability. First, we wish to acknowledge the inclusion of Section B.4.a. in the Draft Tariff. We view this as the one major area of progress in eliminating barriers to microgrids in the Draft Tariff. It allows a microgrid operator to distribute electric power imported from the Company to power users other than itself within the microgrid without markup. We welcome this addition.

The MRC has also repeatedly proposed a companion provision B.4.b. While a version of that language is contained in materials provided in the Company Submission, the most recent proposal submitted to the working group is as follows:

> (b) The Company shall not exclude a Customer Microgrid from eligibility for any Rule or Program of the Company based on the ownership structure of the Customer Microgrid or ownership of the included generating or storage resources. In particular, any requirement that a generating or storage resource be located on a Customer's Premises may be satisfied by any ownership, lease or easement interest in Premises or any portion thereof including any building, structure or appurtenance thereon or any portion of or unit within any such building, structure or appurtenance; and any requirement that a Customer own or lease a generating or storage resource may be

[3] Haw. Rev. Stat. §269-46

satisfied by an agreement that gives the Customer the right to purchase the all or a portion of the output of or have the beneficial use of all or a portion of such generating or storage resource.

We make this proposal because the Draft Tariff does not provide for *any* "compensation for electricity, electric grid services, and other benefits provided . . . by. . . the person or entity operating the microgrid. . ." as required by Act 200. In the course of the working group discussions, the group generally agreed that microgrids would be eligible for all applicable energy and ancillary services purchase programs of the Company, which is one thrust of Section B.4. However, Company Rules 22 – 25 and 27 all contain substantially identical restrictions on eligibility (i) to "*Eligible Customer Generators who own (or lease from a third party*) and operate (or contract to operate with a third party)" an eligible facility and (ii) to eligible facilities which are "*located on the Eligible Customer Generator's premises*. . ." (*emphasis supplied*).

The effect of these limitations is to arbitrarily exclude numerous microgrids that include otherwise eligible resources based on the ownership structure of either the microgrid or the "premises." This is particularly true with respect to microgrids that have more than one included electric power user, or where the microgrid operator is not the (or one of the) principal power user(s) (except perhaps for station power).

"Premises" is defined in Company Rule 1 as: "A piece of land or real estate, including buildings and other appurtenances thereon." It gives no guidance as to whether ownership is required or whether a leasehold or an easement (as is often used for solar projects) would count. Company representatives on the working group stated that the Company in practice interprets this broadly, but they were unwilling to consider putting that in print.

The requirement that a customer own or lease an eligible facility raises more complex issues. A microgrid may be structured in a variety of ways. It may be a single customer that owns and operates its own generation on its own property. Alternatively, however, a microgrid may involve a third-party operator that owns generation on a leasehold or easement on a power user's property and either leases the equipment to or sells

the power to that power user; and in either case the microgrid may serve other power users located on the same or adjacent properties. The combined result of the premises restriction (and its ambiguity) and the ownership or leasehold restriction is an arbitrarily discriminatory patchwork of eligibility results depending on the ownership structure of the overall microgrid. These results are illustrated in a series of 12 scenarios in a power point presentation that we provided to the working group, and which is included in the materials provided as a part of the Company Submission. Essentially identical configurations of parties and roles may qualify or fail to qualify depending on legal technicalities.

Section E.1.a. of the Draft Tariff allows the microgrid operator to be a Company customer (even if it is not a principal electric power user). This ability, when combined with Section B.4.a. of the Draft Tariff would allow a third-party microgrid operator to own generation and distribute both self-generated power and Company supplied power to another power user within the microgrid (assuming that the included generating resources are located only on its own "premises"). However, we note in particular that if a governmental or non-profit entity leases a solar project from a third-party owner, the eligibility of the project for federal investment tax credits is extinguished,[4] and the economics of the project would likely be destroyed. In these instances, neither ownership nor leasing is a practical solution. In general, providing a microgrid as a service to a customer, rather than as a physical asset, is highly restricted.

The MRC respectfully requests that the Commission give serious consideration to including proposed Section B.4.b. in any tariff it authorizes. This would give some meaning to the idea that it is indeed a tariff that meets the requirements of Act 200. It will also be consistent with the statutory direction that "[a]ny person or entity may own or operate an eligible microgrid project." Moreover, as the Commission and the Company move to take better advantage of distributed energy resources under its recently adopted Performance-

[4] See e.g., David K. Burton and Jeffrey G. Davis, IRS Provides Safe Harbor for Solar Contracts with Federal Agencies, January 26, 2017, available at https://www.taxequitytimes.com/2017/01/irs-provides-safe-harbor-solar-contracts-federal-agencies/

Based Regulation rules,[5] it will ensure that microgrids, however structured, are not excluded.

2. Sec. C.1 and C.2: Responsibilities Among the Parties. The MRC accepts the draft as it stands.

3. Sec. D.2: Interconnection. The MRC does not take a position on this provision.

4. Sec. E: Billing and Compensation. The MRC does not have any objection to the existing language in Section E. We had suggested an additional provision as follows:

Operator Supplied Hybrid Microgrids.

a. For the Microgrid Operator and all Microgrid Participants in an Operator Supplied Hybrid Microgrid, all applicable energy credit rates and compensation will apply during Grid-Connected Mode and Island Mode except that electric energy will be supplied to and paid for by the Company and billed to Microgrid Participants as specifically provided in Section E.3.c.

b. Any Generating Facility with an appropriate Customer Interconnection Agreement executed with the Company and supplying energy to a Hybrid Microgrid during Island Mode, and without an existing means for compensation by the utility (e.g., PPA, tariff) or the Microgrid Operator, shall be compensated by Energy Credit Rates as defined and outlined in Rule No. 24.

c. For an Operator Supplied Hybrid Microgrid, Microgrid Participants shall be billed monthly by the Company for (i) the portion of the energy supplied to the Microgrid Participant by the Company, in accordance with Rule No. 8, the applicable rate schedule, and Company's rules filed with the Commission, and (ii) the portion of the energy supplied to the Microgrid Participant by the Microgrid Operator, in accordance with the agreement executed by the Microgrid Operator and the Microgrid Participant. The Company thereafter shall pay the Microgrid Operator for the portion of the energy supplied by the Microgrid Operator at the rate charged by the Microgrid Operator to the Customers.

[5] Decision and Order No 37507 (Docket No. 2018-0088) (2020) ("PBR Order").

This proposed provision is based conceptually on the billing model from the Company's Rule 26 – Community Based Renewable Energy Program, although there is no requirement that Customers invest in the microgrid (they could but may well not). It instead contemplated that the microgrid operator would have a contractual relationship with each microgrid participant as to the rate the participant would pay for power supplied by the microgrid operator, not an arbitrarily defined credit.

We put forward this proposal because we do not believe that the hybrid microgrid provisions of the Draft Tariff represent a serious effort to attract interest in hybrid microgrids. The fundamental economic proposition for microgrids is that they will be able to supply power at attractive rates to customers, and that those rates will pay for the installation of the microgrid. The resilience offered by the microgrid is a side benefit. The ability to sell services to the grid would be a plus, but the fundamental economic proposition is a sale of power to the participants. The Company proposal in the tariff would require that the microgrid operator have a separately negotiated power purchase agreement with the Company (not "plug and play" as the Company has suggested) and that any benefit in lower rates charged by the microgrid operator would accrue to the Company, not its customers.

Our proposal would continue the customer relationship of each participant with the Company. It would assure that all wires charges (both as to Company costs and public benefits) are still paid by the customers. We believe it should be explored as a meaningful alternative to the Draft Tariff.

B. **Appendix II Hybrid Microgrid Agreement**

The Draft Hybrid Microgrid Agreement reinforces our view that the Draft Tariff will not meaningfully encourage hybrid microgrids. Contracts that are used to support a project financing must be long term and not subject to substantial risks of termination or modification. Most of our comments below reflect those concerns.

1. Section 1: Notice and Disclaimer Regarding Future Rate and Tariff Modifications. The MRC acknowledges the Commission's ongoing jurisdiction over the microgrid tariff and the Hybrid Microgrid Agreement. We asked the Company to consider a version of industry standard language (often referred to as a Mobile-Sierra clause)[6] in which the parties agree that they will not seek or support Commission action that would adversely affect the other party's rights or impose further obligations on the other party *under their party-specific Hybrid Microgrid Agreement once executed*:

> "The Company will not support proposals to change this agreement after its execution or tariff changes that require such a change in this agreement once executed without the agreement of the Microgrid Operator."

The Company flatly refused to consider this. The Commission, in such circumstances, may wisely choose to grandfather existing contracts, however, it is reasonable to ask that the Company not to attack its own agreements. Moreover, we asked that the Company delete or modify the last line of clause (b) which reads, "You agree to pay for any costs related to such Commission-ordered modifications." This is, transparently, an effort to defeat the Commission's jurisdiction as to which party should bear the costs of a Commission decision. The Commission should reject this provision.

As written, Section 1. Imposes risks on the microgrid operator that the Company will seek to unilaterally modify its contract with and improperly shift costs to the microgrid operator. We request that the Commission accept our proposed changes.

2. Section 2: Term and Termination. A five-year term is insufficient for financing a microgrid investment. Fifteen years is probably a minimum. A term less than the useful life of the equipment involved will raise questions as to whether the microgrid operator is actually the owner of equipment for tax purposes and may further damage the ability to finance.

3. Section 13(b)(i): Limitation of Liability: Indemnification. The MRC has no further comments on this section.

[6] See e.g., https://www.lawinsider.com/clause/mobile-sierra for examples relating to contracts subject to the jurisdiction of the Federal Energy Regulatory Commission. The concept is essentially the same for contracts subject only to state regulatory jurisdiction.

4. Section 22(c) and 22(f): Microgrid Services Tariff. With respect to the $5.00/kW charge in Section 22(c), the MRC has not undertaken a survey of the Company's administrative charges in other contexts. The Company is not undertaking any new administrative obligations – the customers all get the same billing as before and the microgrid operator generation will be subject to its own separate agreement and charges. The Company has given no explanation or justification for this charge. The provision for additional fees raises the same problem as discussed with respect to Section 1 above.

With respect to the checklist proposed in Section 22(f), we have provided comments to the Division of Consumer Advocacy on the version included in the Company Submittal, and they have circulated a new version which they expect to file with their comments. We may have further suggestions when we have had the opportunity to review. Our overarching comment is that we object to the requirement that a participant sign or initial dozens of individual boxes. When consumers take on much larger obligations for home mortgages, they get a settlement sheet and one or two other disclosure acknowledgements to sign. This proposal is unduly burdensome.

5. Exhibit B, Sec. 2.l.(iii): Information Security Requirements – Security Breach. The MRC has no comments on this section.

6. Exhibit C, Sec. 2: Microgrid Operator Payment for Company Interconnection Facilities. In the experience of MRC members, 30 days is a typical payment period for commercial obligations. The Company has provided no justification as to why it should be entitled to more onerous terms.

III. Further Issues Raised by Act 200.

The Commission has recently adopted a pathbreaking new approach to performance-based regulation.[7] According to the Commission's summary:

> "The PBR Framework adopted by the Commission modernizes the legacy regulatory structure through a set of alternative regulatory mechanisms that focus utilities on

[7] PBR Order.

performance and alignment with public policy goals, as opposed to growth in capital investments or other traditional determinants of utility earnings."[8]

The new framework sets "performance incentive mechanisms" to among other things:

- Incent the Company to accelerate the achievement of its Renewable Portfolio Standard Goals;
- Incent the expeditious acquisition of grid services capabilities from DERs; and
- Incent faster interconnection times for DER systems.

These are, of course, the very outcomes set forth in Section I above that the legislature anticipated and mandated for microgrids in Act 200.

This proceeding has produced little progress on those fronts. Microgrids incorporate renewable resources along with storage and in some cases other generation sources that allow them to act as controllable integrated resources, which enhance grid stability rather than cause problems for grid operators in the way that, for example, unbuffered solar resources can. Because they are controllable resources, microgrids can typically provide a wider array of grid services than other distributed energy resources. In other filings in this proceeding and in materials provided to the working group the MRC has provided extensive discussion of these benefits and suggestions for tariff provisions that could reflect them. We will not repeat them here.

The working group process has also largely bypassed issues relating to interconnection of customer microgrids. Because microgrids act as single controllable entities, their effect on larger grid operation is different than the same assortment of generation and storage would have if the different elements were separately interconnected and not controlled in concert, and they generally pose less risk to the grid. For the same reason, microgrids are at far less risk for complete collapse and the requirement for standby power. In one of its last rounds of changes to the Draft Tariff the Company inserted Section E.5. to make double sure that microgrids were subject to standby charges. This was certainly already covered by Sections B.4. and E.1. However, we believe that standby charges for microgrids should be separately considered based

[8] Summary of Phase 2 Decision & Order Establishing a PBR Framework, available at, https://puc.hawaii.gov/wp-content/uploads/2020/12/PBR-Phase-2-DO-5-Page-Summary.Final_.12-22-2020.pdf

on their unique operating characteristics. In short, the working group process has focused almost entirely on protecting the Company and its customers from microgrids rather than assuring the benefits of microgrids to the Company and its customers as contemplated by Act 200.

IV. Conclusion

The MRC respectfully requests that the Commission include our suggestion with respect to section B.4. of the Draft Tariff. We also believe that without the modifications suggested to the existing hybrid microgrid provisions of the Draft Tariff and the Hybrid Microgrid Agreement there will be little enthusiasm to develop or finance hybrid microgrids. Finally, we continue to suggest that reconvening the working group with a Commission staff or third-party moderator who would help ensure a complete agenda and an open discussion would be necessary to make real progress.

Respectfully submitted on February 10, 2021.

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CERTIFICATE OF SERVICE

I hereby certify that I have on this date served copies of the foregoing document upon the following parties by the method of service noted below:

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