BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

In the Matter of the Application of)
HAWAIIAN ELECTRIC COMPANY, INC.,
HAWAII ELECTRIC LIGHT COMPANY, INC.,)

AND MAUI ELECTRIC COMPANY, LIMITED.)

DOCKET NO. 2014-0130

For Approval to Modify Tariff Rule)
14H, Interconnection of Distributed)
Generating Facilities Operating in)
Parallel with the Companies')
Electric System.

DECISION AND ORDER NO. 32736

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Decision and Order No. 3 2 7 3 6

DECISION AND ORDER

By this Decision and Order, the commission approves in part the revisions to Tariff Rule 14H, Interconnection of Distributed Generating Facilities Operating in Parallel with the Company's Electric System, proposed by HAWAIIAN ELECTRIC COMPANY, INC. ("HECO"), HAWAII ELECTRIC LIGHT COMPANY, INC. ("HELCO"), and MAUI ELECTRIC COMPANY, LIMITED ("MECO") (individually, "Company," collectively, "Companies"), as reflected in their Reply Statement of Position, filed on February 19, 2015.1

[.]¹The Parties are: (1) the Companies; (2) Blue Planet Foundation; (3) the Department of Business, Economic Development, and Tourism ("DBEDT"); (4) Hawaii PV Coalition; (5) Hawaii Renewable Energy Alliance ("HREA"); (6) Hawaii Solar Energy Association ("HSEA"); (7) Renewable Energy Action Coalition of Hawaii, Inc. ("REACH"); (8) The Alliance for Solar Choice ("TASC");

As a result, the commission specifically approves:

- The Companies' proposed addition to the current Section 2 of Tariff Rule 14H's text, which makes it clear (i.e., Distributed Generating Ι clarifies) that Type Facilities (Interconnected, Parallel Operation), to the extent that such facilities operate in parallel with the Company's Distribution System and incorporate the use of an energy storage device, will be subject to the Tariff Rule 14H interconnection review process and must "satisfy" the applicable interconnection standards. result, moreover, is consistent with the commission's stated intent that "[s]uch action is designed to remove the notion that a battery back-up system may somehow bypass the requirement that a customer's distributed generating facility comply with the applicable interconnection standards."2
- 2. The Companies' proposed revisions to the current Section 2.d. of Tariff Rule 14H's text, which clarify that eligible net energy metering customers must follow the applicable requirements set forth in the Companies' Net Energy Metering Tariff Rule 18 and Tariff Rule 14H. The Companies' proposed revisions in

and (9) the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF CONSUMER ADVOCACY ("Consumer Advocate"), an ex-officio party, pursuant to Hawaii Revised Statutes ("HRS") § 269-51 and Hawaii Administrative Rules ("HAR") § 6-61-62(a).

 $^{^{2}\}text{Decision}$ and Order No. 31901, filed on January 31, 2014, at 10.

this regard are consistent with the revisions to the Net Energy Metering Tariff Rule 18 previously approved by the commission in Decision and Order No. 31901.

The additions and revisions to Tariff Rule 14H approved by the commission are in response to the commission's directive in Decision and Order No. 31901 that the Companies incorporate battery back-up system/interconnection review processes in their existing Tariff Rule 14H.

The other revisions to Tariff Rule 14H proposed by the Companies, as reflected in their reply position statement, are denied without prejudice, as beyond the scope of the subject proceeding. The commission, in this regard, notes that on August 21, 2014, it opened In re Public Util. Comm'n, Docket No. 2014-0192 ("Docket No. 2014-0192"), for the purpose of investigating the technical, economic, and policy issues associated with distributed energy resources as they pertain to the electric utilities' operations.3 As such, the commission intends to: (1) examine in Docket No. 2014-0192 the Companies' proposed revisions that are beyond the scope οf (2) further examine subject proceeding; and the

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³Docket No. 2014-0192, Order No. 32269, filed on August 21, 2014, at 1, 4, and 6-7.

back-up system/interconnection review process issue in Docket No. 2014-0192.

I.

Background

HECO is the franchised provider of electric utility service on the island of Oahu, HELCO is the franchised provider of electric utility service on the island of Hawaii, and MECO is the franchised provider of electric utility service on the islands of Lanai, Maui, and Molokai.

Α.

Docket No. 2010-0015

In re Hawaiian Elec. Co., Inc., Hawaii Elec. Light Co.,

Inc., and Maui Elec. Co., Ltd., Docket No. 2010-0015

("Docket No. 2010-0015"), represents a recently docketed proceeding involving the Companies' proposed revisions to their existing Tariff Rule 14H.4

The Parties in Docket No. 2010-0015 were the Companies; the Consumer Advocate; Blue Planet Foundation; DBEDT; Hawaii Inspection Group, Inc.; Hawaii PV Coalition; HREA; HSEA;

⁴See Docket No. 2010-0015, Decision and Order, filed on May 26, 2010; Decision and Order, filed on November 29, 2011; and Decision and Order No. 30027, filed on December 20, 2011.

South Maui Renewable Resource, LLC; The Solar Alliance, now known as Solar Energy Industries Association; and Zero Emissions Leasing LLC. The Interstate Renewable Energy Council was a participant. The Companies collectively refer to these entities as the "Interested Stakeholders," excluding the Consumer Advocate and the Companies.

Consistent with Ordering Paragraph No. 6 of Decision and Order No. 30027, filed on December 20, 2011, in Docket No. 2010-0015:

The. . . Companies: (A) shall file any future proposed revisions to Rule 14H as a formal application pursuant to HAR chapter 6-61, subchapter 6, with copies served on the Parties and Participant in this proceeding; and (B) are strongly encouraged to consult with interested stakeholders beforehand, prior to filing a Rule 14H application.

Docket No. 2010-0015, Decision and Order No. 30027, Ordering Paragraph No. 6, at 69; see also id., Section II.F, Review and Approval Process for any Future Proposed Modifications to Rule 14H, at 62-65.

 $^{^5 \}underline{\text{See}}$ Docket No. 2010-0015, Decision and Order No. 30027, at 1 n.1; Solar Energy Industries Association's letter, dated February 12, 2012; and Commission's reply memorandum, dated February 27, 2012.

⁶Application; Attachments 1-2; Verification; and Certificate of Service, filed on June 2, 2014 (collectively, "Application"), at 5.

Docket No. 2010-0015 is closed.7

В.

Transmittals Nos. 14-01, 14-01H, and 14-01M

On January 6, 2014, the Companies filed their respective non-docketed transmittals by which they proposed certain clarifying revisions to their existing Net Energy Metering Tariff Rule No. 18.8 The Companies requested an effective date of February 6, 2014, following the expiration of the thirty-day statutory notice period.

On January 31, 2014, the commission issued Decision and Order No. 31901, approving the Companies' proposed clarifying revisions to Tariff Rule 18. In addition, the commission instructed the Companies to "include a provision in the text and appendices to Tariff Rule 18, to the extent applicable, which clarifies that a customer that installs a battery back-up system must also obtain an interconnection review by the electric

⁷See Docket No. 2010-0015, Commission's memorandum, dated February 27, 2012; see also Decision and Order No. 30027, Section II.F, Review and Approval Process for any Future Proposed Modifications to Rule 14H, at 62-65 (the commission declines to keep Docket No. 2010-0015 open on an indefinite basis).

⁸HECO's Transmittal No. 14-01, filed on January 6, 2014; HELCO's Transmittal No. 14-01H, filed on January 6, 2014; and MECO's Transmittal No. 14-01M, filed on January 6, 2014.

utility to ensure the proper interconnection of the customer's generating facility with the electric utility's system."9

The commission, by its written decision, also instructed the Companies to file an application for the limited purpose of incorporating corresponding battery back-up system/interconnection review process revisions to their Tariff Rule 14H:

Here, the commission instructs the Companies to file an application to amend Tariff Rule 14H for the purpose of clarifying the following matters:

- 1. A customer that installs a battery back-up system must also obtain an interconnection review by the electric utility to ensure the proper interconnection of the customer's generating facility with the electric utility's system; and
- 2. The interconnection requirements for a customer's battery back-up system and the screening process to review such a request for interconnection.

Such action is designed to remove the notion that a battery back-up system may somehow bypass the requirement that a customer's distributed generating facility comply with the applicable interconnection standards.

Decision and Order No. 31901, at 9-10 (emphasis added); see also id., Ordering Paragraph No. 4, at 12 (the Companies shall file their Rule 14H application by May 1, 2014).

 $^{\,^9\}mathrm{Decision}$ and Order No. 31901, Ordering Paragraph No. 2, at 10-11.

On February 6, 2014, the Companies filed their commission-approved revised tariff sheets for Rule 18, with an effective date of February 6, 2014.

C.

Docket No. 2014-0130

On June 2, 2014, the Companies filed the subject Application pursuant to the commission's Decision and Order No. 31901.¹⁰ The Companies served copies of their Application upon the Consumer Advocate via hand-delivery, and courtesy copies upon the Interested Stakeholders via electronic mail.

On July 1, 2014, the commission granted intervention to the seven movants (Blue Planet Foundation, DBEDT, Hawaii PV Coalition, HREA, HSEA, REACH, and TASC), subject to certain conditions, including the requirement that the intervenors not unreasonably broaden the pertinent issue raised in the subject proceeding. 11

On September 29, 2014, HSEA filed its position statement. Thereafter, on October 2, 2014: (1) the Companies,

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 $^{^{10}\}underline{\text{See}}$ Order No. 32068, filed on May 6, 2014 (approving an extension of time until June 2, 2014 for the Companies to file their Rule 14H application mandated by Decision and Order No. 31901).

 $^{^{11}\}mbox{Order No. 32178, filed on July 1, 2014.}$

Blue Planet Foundation, the Consumer Advocate, DBEDT, HREA, and REACH filed their respective position statements; and (2) Hawaii PV Coalition and TASC filed a joint position statement.

Initially, the Parties' reply position statements were due by December 18, 2014. Said deadline date was extended by the commission until February 19, 2015, in response to the Parties' attempts to reach a full or partial settlement agreement, which ultimately did not materialize. 12

As a result: (1) on February 17, 2015, REACH filed its reply position statement; (2) on February 19, 2015, the Companies, the Consumer Advocate, DBEDT, and HSEA filed their respective reply position statements; and (3) also on February 19, 2015, Blue Planet Foundation, HREA, Hawaii PV Coalition, and TASC filed their joint reply position statement (collectively, the "TASC Parties").

D.

Issue

The issue in this proceeding is limited to whether the revisions to Tariff Rule 14H proposed by the Companies in response to Decision and Order No. 31901 are just and reasonable. 13

 $^{^{12}\}underline{\text{See}}$ Order No. 32525, filed on December 19, 2014; and Order No. 32665, filed on February 4, 2015.

The commission, in turn, by its Decision and Order No. 31901, instructed the Companies to file an application for the <u>limited</u> purpose of incorporating corresponding battery back-up system/interconnection review process revisions to their existing Tariff Rule 14H.

Ε.

Companies' Proposed Revisions to Tariff Rule 14H

The Companies' existing Tariff Rule 14H consists of five sections: (1) the text to Tariff Rule 14H; (2) Appendix I, Distributed Generating Facility Interconnection Standards Technical Requirements, including Exhibit A; (3) Appendix II, a Standard Interconnection Agreement form, including Exhibits A to D; (4) Appendix II-A, a Standard Three Party Interconnection Agreement form, including Exhibits A - D; and (5) Appendix III, Interconnection Process Overview.

The Companies' proposed revisions to Tariff Rule 14H are set forth in Exhibit A of their reply position statement, filed on February 19, 2015. The Companies, by their Exhibit A, propose to:

1. Revise: (A) the text of Tariff Rule 14H;
(B) Appendix I; and (C) Appendix III; and

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 $^{^{13}}$ Order No. 32178, at 7-8; and Procedural Order No. 32256, filed on August 7, 2014, Section I, Statement of the Issue, at 3.

2. Adopt a three-page Appendix II-B, Application for Non-Export Distributed Generation Facilities.

Conversely, the Companies do not propose any revisions to Appendices II or II-A of Tariff Rule 14H.

1.

Proposed Revisions to the Text of Rule 14H

The text of Tariff Rule 14H presently consists of three sections: (1) Section 1, Interconnection Standards; (2) Section 2, Interconnection Agreement; and (3) Section 3, Interconnection Process. Currently, the subject text does not include a Definitions section.

In general, the Companies' proposed revisions to the text of Tariff Rule 14H include adding a Definitions section (i.e., a newly numbered Section 2, Definitions), such that the subject text will consist of four sections: (1) Section 1, Interconnection Standards; (2) proposed Section 2, Definitions; (3) Section 3, Interconnection Agreement (currently Section 2); and (4) Section 4, Interconnection Process (currently Section 3).

The Companies' proposed revisions to the text of Rule

14H form the bases for the proposed corresponding revisions to

Appendices I and III, and their proposed new Appendix II-B. 14

As such, the Companies' proposed revisions to the text of

Rule 14H include:

- 1. Changing the title of Rule 14H, from the Interconnection of Distributed Generating Facilities Operating in Parallel with the Company's Electric System, to the Interconnection of Distributed Generating Facilities Intended to Operate in Parallel With the Company's Distribution System.
- 2. New Section 2, Definitions: Add Section 2,
 Definitions, which defines the terms "Distributed Generation
 Facility," "Distribution System," "Generating Facility,"

 "Interconnect(ed)" or "interconnection," "Momentary Parallel
 Operation," and "Parallel operation."
- 3. <u>Current Section 2, Interconnection Agreement</u>
 (<u>renumbered as Section 3</u>): For the current Section 2.a.,
 clarify that customers of Distributed Generating Facilities that
 are intended to operate in parallel with the Company's Distribution
 System must complete and execute: (A) one of the two Standard
 Interconnection Agreement forms that are set forth in the existing

 $^{^{14}\}underline{\text{See}}$ Application, at 8-9 (the Companies propose certain modifications to the text of Tariff Rule 14H in order to provide consistency with the proposed modifications to Appendices I and III and the new Appendix II-B).

Appendices II or II-A; 15 or (B) the form set forth in the Companies' proposed new Appendix II-B, Application for Non-Export Distributed Generation Facilities. Consistent thereto, the Companies also propose to amend the definition of "Interconnection Application" currently set forth in Appendix I of Tariff Rule 14H to read as follows: 16

Interconnection Application: Completion of one of the
<a href="https://doi

Companies' proposed revisions to Appendix I, Section 1.n., of Tariff Rule 14H.

- 4. <u>Current Section 2, Interconnection Agreement</u>

 (renumbered as Section 3): For the current Section 2.d.,

 clarify that eligible net energy metering customers must follow

 the applicable requirements set forth in the Net Energy Metering

 Tariff Rule 18 and Tariff Rule 14H.
- 5. <u>Current Section 2, Interconnection Agreement</u>

 (renumbered as Section 3): Add a new subsection (e) to govern the use of an energy storage device, as follows:

Distributed Generating Facilities that incorporate the use of an energy storage device, e.g. battery storage, shall obtain an interconnection review

¹⁵To reiterate, the Companies do not propose any revisions to Appendices II or II-A.

 $^{{\}ensuremath{^{16}\text{Proposed}}}$ additions are underscored.

by the Company pursuant to this Rule 14H and satisfy the Company's Interconnection Standards to the extent that such distributed generating facilities operate in parallel with the Company's Distribution System.

Companies' proposed Section 3.e. (currently Section 2) to Tariff Rule 14H.

6. Current Section 3, Interconnection Process (renumbered as Section 4): Add two new subsections, (c) and (d), respectively, which identify two types of operations that are not subject to the Tariff Rule 14H interconnection review process:

(A) Distributed Generation Facilities that are interconnected but will not operate in parallel with the Company's Distribution System; and (B) generators that are not interconnected with the Company's Distribution System.

That said, facilities within the first category shall register with the Company by completing and submitting the form set forth in the Companies' proposed new Appendix II-B, Application for Non-Export Distributed Generation Facilities. Conversely, non-interconnected generators (i.e., facilities within the second category) need not register with the Company. In this regard, the Companies' proposed two new subsections state:

Distributed Generating Facilities that are interconnected but will not operate in parallel with the Company's Distribution System, are not subject to the interconnection review process under this Rule 14H except that [the] Customer shall register such Distributed Generation Facilities

by completing and submitting an Application for Non-Export Distributed Generation Facilities provided in Appendix II-B to this Rule 14H. Such registration shall satisfy the Customer's notice requirements set forth in Tariff Rule 3B (Change In Customer's Equipment Or Operations) and is required for purposes of determining potential load that the Company may be required to serve.

Generators that are not interconnected with the Company's Distribution System are not subject to the interconnection review process under this Rule 14H and are not required to be registered with the Company.

Companies' proposed Sections 4.c. and 4.d. (currently Section 3) to Tariff Rule 14H.

2.

Proposed Revisions to Appendix I, Distributed Generating Facility Interconnection Standards Technical Requirements

The Companies propose to revise Appendix I by adding definitions for the terms "Distributed Generation Facility," "Interconnect(ed)" or "interconnection," "Momentary Parallel Operation," and "Parallel Operation." Conversely, while the proposed revisions to the text of Rule 14H also add definitions for the terms "Distribution System" and "Generating Facility," such terms are already defined in the existing Appendix I. The Companies, as part of Appendix I, also propose to expand the existing definitions of: (1) "Distribution System" to include a

reference to "2.4kV;" and (2) "Interconnection Application" to include a reference to their proposed Appendix II-B Application.

The Companies, in addition, propose to amend Section 4.i. of Appendix I by clarifying that "Generators that are not interconnected with the utility's distribution system at any time and which are therefore not covered under an interconnection agreement may be operated by [the] Customer at their discretion." 17

3.

Proposed New Appendix II-B, Application for Non-Export Distributed Generation Facilities (Companies' Proposed New Registration Form)

The Companies propose to add a registration form, specifically, Appendix II-B, Application for Non-Export Distributed Generation Facilities. The Companies explain that said registration form/process shall apply to:

1. Distributed Generating Facilities that are interconnected with the Company's Distribution System and are designed to operate (i.e., function) in parallel with the Company's Distribution System with only momentary parallel operation, i.e., for a duration of less than 100 milliseconds; 18 and

¹⁷Companies' proposed revisions to Appendix I, Section 4.i., of Tariff Rule 14H.

¹⁸ See Companies' Reply Statement of Position, Section II.E,
Generators that are "Interconnected" but Do Not Operate in
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2. Distributed Generating Facilities that are interconnected with the Company's Distribution System but will not operate in parallel with the Company's Distribution System.¹⁹

Ultimately, the Companies note that said registration form/process "shall satisfy the Customer's notice requirements set forth in Tariff Rule 3B (Change In Customer's Equipment Or Operations) and is required for purposes of determining potential load that the Company may be required to serve."²⁰

4.

Proposed Revisions to Appendix III, Interconnection Process Overview

The underlying purpose of the Companies' existing

Appendix III of Tariff Rule 14H is to determine, through the

Initial Technical Review process:

Parallel with the Companies' Distribution System or Function with "Momentary Parallel Operation" must Still be Registered, at 13-15.

^{19&}lt;u>See</u> Companies' Reply Statement of Position, Section II.E, Generators that are "Interconnected" but Do Not Operate in Parallel with the Companies' Distribution System or Function with "Momentary Parallel Operation" must Still be Registered, at 13-15.

²⁰Companies' proposed revisions to Section 4.c. to the text of Tariff Rule 14H; and Companies' proposed Screen 2 to Appendix III of Tariff Rule 14H.

- 1. Whether the proposed Generating Facility qualifies for Simplified Interconnection; or
- 2. If the proposed Generating Facility can be made to qualify for interconnection by performing a Supplemental Review that will be able to determine any additional requirements; or
- 3. Whether an Interconnection Requirements Study will be required, and if so, the estimated costs and schedule for performing such a study.²¹

The Companies propose to revise the current Section 2,
Initial Technical Review process, of Appendix III, by adding
two new interconnection review/screening steps (Screens 2 and 3)
as follows:

Screen 2: Is the Generating Facility designed to operate in parallel with the Distribution System?

If Yes, continue to Screen 3.

If No, Customer is required to register the Generating Facility by completing and submitting an Application for Non-Export Distributed Generation Facilities provided in Appendix II-B. Registration shall satisfy the Customer's notice requirements set forth in Tariff Rule 3B (Change in Customer's Equipment Or Operations) and is required for purposes of determining potential load that the Company may be required to serve.

Screen 3: Is the Generating Facility designed to operate in parallel with the Distribution System

²¹Tariff Rule 14H, Appendix III, Section 2.a., Purpose section.

for a duration of less than 100 milliseconds, i.e. "momentary parallel operation"?

If No, continue to Screen 4.

TfYes. Customer is required to register Generating Facility by completing Application for submitting an Non-Export Distributed Generation Facilities provided Appendix II-B. Registration shall satisfy the Customer's notice requirements set forth Tariff Rule 3B (Change in Customer's Equipment Or Operations) and is required for purposes of determining potential load that the Company may be required to serve. Such systems shall be deemed to be "non-exporting" and shall not require However, the Company reverse power protection. may install a bi-directional advanced meter, at Company's expense. Company shall have the right to disconnect a Generating Facility without prior notice to the Customer pursuant to Rule 14H, Section 4.b, in the event the Company determines that the Generating Facility is operating parallel with the Distribution System in excess of momentary parallel operation and Customer shall pay for any and all costs incurred by the Company in enforcing this right.

<u>Significance</u>: If it can be assured that the Generating Facility is designed to function with only momentary parallel operation, then a Generating Facility will be allowed to interconnect with no further technical review.

Companies' proposed Screens 2 and 3 to Appendix III of Tariff Rule 14H.

Discussion

All rates, charges, classifications, schedules, rules, and practices made, charged, or observed by a public utility must be just and reasonable and filed with the commission, in accordance with HRS § 269-169(a) and (b).

The commission, in the subject proceeding, limits its review to adjudicating whether the revisions to Tariff Rule 14H proposed by the Companies in response to Decision and Order No. 31901 are just and reasonable.²²

In so doing, the commission chooses to address the battery back-up system/interconnection review process issue in the subject proceeding, without delay.²³ That said, the commission recognizes that Tariff Rule 14H is an evolving work in progress.²⁴

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²²See Order No. 32178, at 7-8 (the sole issue is limited to whether the revisions to Tariff Rule 14H proposed by the Companies in response to Decision and Order No. 31901 are just and reasonable) (the scope of this proceeding is limited to clarifying the matters identified by the commission on page 10 of Decision and Order No. 31901).

²³See, e.g., Docket No. 2010-0015, Decision and Order No. 30027, at 7-8 (the commission proceeds with addressing each of the disputed Tariff Rule 14H issues raised without delay, contrary to some of the parties' suggestions that the commission wait until the Reliability Standards Working Group has completed its work in In re Public Util. Comm'n, Docket No. 2011-0206).

Docket No. 02-0051, Decision and Order No. 19773, filed on November 15, 2002, at 12 (the commission recognizes that

As such, the commission intends to further examine the battery back-up system/interconnection review process issue in Docket No. 2014-0192, the commission's distributed energy resources proceeding.

The Companies' existing Tariff Rule 14H does not define "interconnect" or "parallel operation." As such, the Companies, by their reply position statement, propose to define said terms, as follows:

"Interconnect" or "interconnected" or "interconnection": The physical connection of any Distributed Generating Facility to the Distribution System, including the facilities required to provide the electric distribution service to a Customer, using electrical wires, switches, and related equipment located on either side of the point of common coupling as appropriate to their purpose and design to allow the physical connection of a Distributed Generating Facility to the Distribution System.

"Parallel operation": The operation of a Distributed Generating Facility, while interconnected, such that customer load can be fed by the Distributed Generating Facility and Distribution System simultaneously.

"Momentary Parallel Operation": Parallel Operation for a duration less than 100 [milliseconds ("ms")].

Companies' proposed new Sections 2.d., 2.f., and 2.e. of Tariff Rule 14H.

distributed generation/interconnection represents an evolving work in progress).

The Companies, by their reply position statement, appear to differentiate between four types of operations:

(1) Type I: Interconnected, Parallel Operation; (2) Type II: Interconnected, Momentary Parallel Operation Only, Non-Export System; (3) Type III: Interconnected, Non-Parallel Operation, Non-Export System; and (4) Type IV: Non-Interconnected. 25

1. Type I - Interconnected, Parallel Operation:
Distributed Generating Facilities that are interconnected with the
Company's Distribution System and are intended to operate in
parallel with the Company's Distribution System. Prior to
interconnecting or operating the Distributed Generating Facilities
with the Company's Distribution System, the customers on whose
premises the Distributed Generating Facilities are intended to
operate in parallel with the Company's Distribution System shall
complete and execute one of the following forms: (A) the Standard

²⁵See also Consumer Advocate's Reply Statement of Position, filed on February 19, 2015, at 5-6 (the Parties were able to categorize distributed generation operations to the four types reflected in Attachment A of the Consumer Advocate's reply position statement); and TASC Parties' Reply Statement of Position, filed on February 19, 2015, at 6-8 (putting the issues of parallel operation and accelerated interconnection together yields four types of distributed energy resource facilities under consideration in this proceeding).

²⁶Companies': (1) proposed revisions to Section 1 of Tariff Rule 14H; and (2) proposed new Section 2, Definitions, to Tariff Rule 14H.

Interconnection Agreement form (existing Appendix II of Tariff Rule 14H); or (B) the Standard Three Party Interconnection Agreement form (existing Appendix II-A of Tariff Rule 14H).²⁷

To the extent that such facilities operate in parallel with the Company's Distribution System and incorporate the use of an energy storage device, such facilities will be subject to the Tariff Rule 14H interconnection review process and must "satisfy" the applicable interconnection standards. In this regard, customers that request to interconnect and operate Distributed Generating Facilities in parallel with the Company's Distribution System under Appendices II or II-A will be processed in accordance with Appendix III, Interconnection Process Overview, of Tariff Rule 14H.29

Appendix III, in turn, outlines the respective interconnection review processes governing: (1) Simplified Interconnection; (2) Supplemental Review; and (3) an Interconnection Requirements Study.

²⁷Companies' proposed revisions to Section 3.a. (currently Section 2.a.) of Tariff Rule 14H.

²⁸Companies' proposed new Section 3.e. (currently Section 2) of Tariff Rule 14H.

²⁹Companies' proposed revisions to Section 4.a. (currently Section 3.a.) of Tariff Rule 14H.

Operation Only, Non-Export System: Distributed Generating Facilities that are interconnected with the Company's Distribution System and are designed to operate (i.e., function) in parallel with the Company's Distribution System with only momentary parallel operation, i.e., for a duration of less than 100 milliseconds. 30

Customers that request to:

. . . interconnect and operate distributed generation facilities that are intended to interconnect with momentary parallel operation with the Company's Distribution System under the Application For Non-Export Distributed Generation Facilities provided in [the Companies' proposed new] Appendix II-B, will be processed in accordance with the procedures in the Interconnection Process Overview, which is included in Appendix III of [Tariff Rule 14H].

Companies' proposed revisions to Section 4.a. (currently Section 3.a.) of Tariff Rule 14H; see also Companies' proposed new Section 2.e. of Tariff Rule 14H (Companies' proposed definition of "Momentary parallel operation").

In other words, for Distributed Generating Facilities that are interconnected with the Company's Distribution System but function with only momentary parallel operation, said customers

³⁰Companies' Reply Statement of Position, at 14; and Companies' proposed Screen 3 to Appendix III of Tariff Rule 14H.

"shall register the distributed generation facilities with the Companies by completing and submitting an Application for Non-Export Distributed Generation Facilities in the form of proposed Appendix II-B to Rule 14H[.]"31

The Companies, pursuant to their proposed Screen 3 to Appendix III of Tariff Rule 14H, explain:

[Said registration] shall satisfy the Customer's notice requirements set forth in Tariff Rule 3B (Change in Customer's Equipment Or Operations) and is required for purposes of determining potential load that the Company may be required to serve. Such systems [with momentary parallel operation] shall be deemed to be "non-exporting" and shall not require reverse power protection. However, the Company may install a bi-directional advanced meter, at Company's expense. Company shall have the right to disconnect a Generating Facility without prior notice to the Customer pursuant to Rule 14H, Section 4.b, in the event the Company determines that the Generating Facility operating in parallel with the Distribution System in excess of momentary parallel operation and Customer shall pay for any and all costs incurred by the Company in enforcing this right.

Significance: If it can be assured that the Generating Facility is designed to function with only momentary parallel operation, then a Generating Facility will be allowed to interconnect with no further technical review.

³¹Companies' Reply Statement of Position, at 14; see also Companies' proposed new Section 2, Definitions, to Tariff Rule 14H; Companies' proposed revisions to Sections 3.a. and 4.a. (currently Sections 2.a. and 3.a.) of Tariff Rule 14H; and Companies' proposed Screen 3 to Appendix III of Tariff Rule 14H.

HECO's proposed Screen 3 to Appendix III of Tariff Rule 14H (emphasis added); see also Companies' Reply Position Statement, at 15-16 (if a customer for a system with momentary parallel operation submits a completed Appendix II-B Application and passes the Initial Technical Review, the customer will receive the Company's approval to interconnect with no further review required under the existing expedited interconnection review process set forth in Appendix III of Tariff Rule 14H) and Section II.G, Generators with "Momentary Parallel Operation" Would be Deemed Non-Exporting for Purposes of Rule 14H and Would not be Required to Install Reverse Power Protection, at 16.

3. Type III - Interconnected, Non-Parallel Operation, Non-Export System: Distributed Generating Facilities that are Interconnected with the Company's Distribution System but will not Operate in Parallel with the Company's Distribution System. Such facilities are not subject to the Tariff Rule interconnection review process and may be operated by the customer at the customer's discretion, but must register such Distributed Generating Facilities with the Company by completing submitting the application set forth in the Companies' proposed Appendix II-B, Application for Non-Export Distributed new

Generation Facilities).³² As the Companies explain, "[said] registration shall satisfy the Customer's notice requirements set forth in Tariff Rule 3B (Change In Customer's Equipment Or Operations) and is required for purposes of determining potential load that the Company may be required to serve."³³

4. Type IV - Non-Interconnected: Generators that are not Interconnected with the Company's Distribution System. Such generators are not subject to the Tariff Rule 14H interconnection review process, need not register with the Company, and may be operated by the customer at the customer's discretion.³⁴

Here, the commission approves as just and reasonable the Companies' proposed additions and revisions which address the limited issue in the subject proceeding. Conversely, the commission denies without prejudice the Companies' proposed revisions which address matters that are outside the scope

³²Companies' Reply Statement of Position, at 14; Companies' proposed new Section 2, Definitions, to Tariff Rule 14H; Companies' proposed revisions to Section 4.c. (currently Section 3) of Tariff Rule 14H; and Companies' proposed Screen 2 to Appendix III of Tariff Rule 14H.

³³Companies' proposed revisions to Section 4.c. (currently Section 3) of Tariff Rule 14H.

^{· 34}Companies' Reply Statement of Position, at 11; Companies' proposed revisions to Section 4.d. (currently Section 3) of Tariff Rule 14H; and Companies' proposed revisions to Appendix I, Section 4.i., of Tariff Rule 14H.

of the subject proceeding. The commission, in support thereto, specifically finds and concludes as follows:

1. Overall, most of Companies' proposed revisions to Tariff Rule 14H go beyond the scope of the battery back-up system/interconnection review process issue identified by the commission in its Decision and Order No. 31901. The Companies, in this regard, represent and explain:

[A]fter the Application was filed, intervening parties ' attempted additional issues insert into the docket, including whether systems that do not export energy to the grid (with or without energy storage) should receive preferential treatment and by-pass interconnection review under Rule 14H. This is arguably contrary to the Companies' stated intent in issuing Decision and Order No. 31901, i.e. that "Such action is designed to remove the notion that battery back-up system may somehow bypass the requirement that a customer's distributed generating facility comply with the applicable interconnection standards."

Companies' Reply Statement of Position, at 3 (emphasis added); see also id., at 3 (the primary disagreement between the Parties was whether certain types of photovoltaic ("PV") systems should receive preferential treatment), 4 (certain parties believed that PV systems that will export energy to the grid for durations of more than 100 ms should also receive preferential treatment and bypass the Tariff Rule 14H interconnection review process), 7-8 (certain of the parties advocated that all types of "non-exporting" facilities, whether or not such facilities include

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energy storage systems, be exempt from interconnection review and screening under Tariff Rule 14H, except for the existing Screens 1 and 2), and 13 (the Companies do not agree with a proposed that will allow PV screening process systems which interconnected with the Companies' Distribution System for less than 60 cycles (i.e., one second) to bypass the Tariff Rule 14H technical review process, or with certain of the parties' proposed revisions to Screen 3, which will enable PV systems that export power for less than one minute to bypass additional technical review screening under Tariff Rule 14H).

2. That said, the Companies' proposed addition to the current Section 2 of Tariff Rule 14H's text does address the battery back-up system/interconnection review process issue identified by the commission in its Decision and Order No. 31901. Specifically, the Companies propose to add the following language to the current Section 2 of Tariff Rule 14H:

Distributed Generating Facilities that incorporate the use of an energy storage device, e.g. battery storage, shall obtain an interconnection review by the Company pursuant to this Rule 14H and satisfy the Company's Interconnection Standards to the extent that such distributed generating facilities operate in parallel with the Company's Distribution System.

Companies' proposed Section 3.e. (currently Section 2) to Tariff Rule 14H.

3. The Companies' proposed additional language to the current Section 2 of Tariff Rule 14H makes it clear (i.e., clarifies) that Type I Distributed Generating Facilities (Interconnected, Parallel Operation), to the extent that such facilities operate in parallel with the Company's Distribution System and incorporate the use of an energy storage device, will be subject to the Tariff Rule 14H interconnection review process and must "satisfy" the applicable interconnection standards. Such a result, moreover, is consistent with the commission's stated intent that "[s]uch action is designed to remove the notion that a battery back-up system may somehow bypass the requirement that a customer's distributed generating facility comply with the applicable interconnection standards.

³⁵See, e.g., Companies' Reply Statement of Position, at 7 (in general, the interested stakeholders support modifications to Rule 14H that pertain to and address issues relating to the interconnection of systems that operate in parallel with the Companies' electric system in order to comply with Decision and Order No. 31901); Consumer Advocate's Reply Statement of Position, at 5 (the Parties do not disagree on the treatment of DG systems that operate in parallel and export energy to the electric utility system); DBEDT's Reply Statement of Position, filed on February 19, 2015, at 4 (generating facilities that both operate in parallel with and export electricity to the Companies' distribution and transmission grids should be subject to the existing Tariff Rule 14H screens); and the TASC Parties' Reply Statement of Position, filed on February 19, 2015, at 6 (none of the Parties have arqued that distributed energy resources that operate parallel with the electric utilities' systems should avoid interconnection review).

³⁶Decision and Order No. 31901, at 10.

- 4. Meanwhile, the Companies' proposed revisions to the current Section 2.d. of Tariff Rule 14H's seek to clarify that eligible net energy metering customers must follow the applicable requirements set forth in the Companies' Net Energy Metering Tariff Rule 18 and Tariff Rule 14H. The Companies' proposed revisions in this regard are consistent with the revisions to Tariff Rule 18 previously approved by the commission in Decision and Order No. 31901.
- 5. Based on findings nos. 2 to 4, above, the commission approves as just and reasonable the Companies' proposed additions and revisions to the current Section 2 of Tariff Rule 14H, as follows: 37
 - Interconnection Agreement
 - Customers with [distributed generating facilities Distributed Generating eligible Facilities that are energy metering pursuant Chapter 269 of the Hawaii Statutes, shall follow the rules and requirements set forth in Rule No. 18 for Net Energy Metering[.] and this Rule No. 14H, as applicable.
 - e. Distributed Generating Facilities that incorporate the use of an energy storage device, e.g. battery storage, shall obtain an interconnection review by the Company pursuant to this

³⁷Deletions are bracketed and revisions are underscored.

Rule 14H and satisfy the Company's Interconnection Standards to the extent that such distributed generating facilities operate in parallel with the Company's Distribution System.

- Conversely, the Companies' other proposed revisions 6. to Tariff Rule 14H are denied without prejudice as beyond the scope of the subject proceeding. Such matters include, but are not necessarily limited to: (A) the Companies' proposed registration process and potential "preferential treatment" for Type (Interconnected, Momentary Non-Parallel Operation Only, Non-Export System) and Type III (Interconnected, Non-Parallel Operation, System) operations, irrespective of whether battery back-up system will be installed for such an operation; and (B) the Companies' proposal to make it clear that Type IV Generators (Non-Interconnected) may be operated by the customer at the customer's discretion, irrespective of whether a battery back-up system will be installed for such a generator.
- 7. The commission, on August 21, 2014, opened Docket No. 2014-0192 for the purpose of investigating the technical, economic, and policy issues associated with distributed energy resources as they pertain to the electric utilities' operations.³⁸ The commission, thus, does not view the subject proceeding

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2014-0130

³⁸Docket No. 2014-0192, Order No. 32269, at 1, 4, and 6-7.

(Docket No. 2014-0130) as a vehicle for addressing the "policy issues" related to distributed generation.³⁹

The commission, in sum, approves as just and reasonable:

- 1. The Companies' proposed addition to the current Section 2 of Tariff Rule 14H's text, which makes it clear (i.e., clarifies) that Type I Distributed Generating Facilities (Interconnected, Parallel Operation), to the extent that such facilities operate in parallel with the Company's Distribution System and incorporate the use of an energy storage device, will be subject to the Tariff Rule 14H interconnection review process and must "satisfy" the applicable interconnection standards; and
- 2. The Companies' proposed revisions to the current Section 2.d. of Tariff Rule 14H's text, which clarify that eligible net energy metering customers must follow the applicable requirements set forth in the Companies' Net Energy Metering Tariff Rule 18 and Tariff Rule 14H.

As a result, the current Section 2 of Tariff Rule 14H's text is amended to now read as follows:

2. Interconnection Agreement

³⁹See, e.g., TASC Parties' Reply Statement of Position, filed on February 23, 2015, at 39 (the TASC Parties have outlined a plan that will comprehensively address several key policy issues related to distributed generation).

- d. Customers with Distributed Generating Facilities that are eligible for net energy metering pursuant to Chapter 269 of the Hawaii Revised Statutes, shall follow the rules and requirements set forth in Rule No. 18 for Net Energy Metering and this Rule No. 14H, as applicable.
- e. Distributed Generating Facilities that incorporate the use of an energy storage device, e.g. battery storage, shall obtain an interconnection review by the Company pursuant to this Rule 14H and satisfy the Company's Interconnection Standards to the extent that such distributed generating facilities operate in parallel with the Company's Distribution System.

Conversely, the Companies' other proposed revisions to Tariff Rule 14H are denied without prejudice. Instead, the commission intends to: (1) examine such matters in Docket No. 2014-0192; and (2) further examine the battery back-up system/interconnection review process issue in Docket No. 2014-0192.

III.

Orders

THE COMMISSION ORDERS:

1. The Companies' proposed revisions to Tariff Rule 14H, as set forth in their reply position statement, filed on February 19, 2015, are approved in part, consistent with the terms

of this Decision and Order. As a result, the commission specifically approves:

- A. The Companies' proposed addition to the current Section 2 of Tariff Rule 14H's text, which makes it clear (i.e., clarifies) that Type I Distributed Generating Facilities (Interconnected, Parallel Operation), to the extent that such facilities operate in parallel with the Company's Distribution System and incorporate the use of an energy storage device, will be subject to the Tariff Rule 14H interconnection review process and must "satisfy" the applicable interconnection standards; and
- B. The Companies' proposed revisions to the current Section 2.d. of Tariff Rule 14H's text, which clarify that eligible net energy metering customers must follow the applicable requirements set forth in the Companies' Net Energy Metering Tariff Rule 18 and Tariff Rule 14H.
- 2. The Companies' other proposed revisions to Tariff Rule 14H, as reflected in their reply position statement, are denied without prejudice.
- 3. Within three business days from the date of this Decision and Order, the Companies shall file their commission-approved, revised tariff sheets for Tariff Rule 14H, with the applicable issued and effective dates. Unless ordered

otherwise by the commission, the effective date shall be the filing date of the commission approved, revised tariff sheets.

4. Upon the filing of the commission approved, revised tariff sheets, this docket shall be considered closed, unless ordered otherwise by the commission.

DONE at Honolulu, Hawaii MAR 3 1 2015

PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

Randall V. Iwase, Chair

By Michael E. Champley, Commissioner

By Manamy H. akerba

Lorraine H. Akiba, Commissioner

APPROVED AS TO FORM:

Michael Azama

Commission Counsel

2014-0130.sr

CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

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