

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

---- In the Matter of ---- )  
 )  
PUBLIC UTILITIES COMMISSION )  
 )  
Instituting a Proceeding )  
to Investigate Distributed )  
Energy Resource Policies. )  
\_\_\_\_\_ )

DOCKET NO. 2014-0192

ORDER NO. 35266

ADDRESSING HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC  
LIGHT COMPANY, INC., AND MAUI ELECTRIC COMPANY, LIMITED'S  
PROPOSED TARIFFS FILED PURSUANT TO DECISION AND ORDER NO. 34924

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2018 FEB - 5 P 12:00  
PUBLIC UTILITIES  
COMMISSION

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By this Order,<sup>1</sup> the Public Utilities Commission ("commission") addresses the HECO Companies' compliance filings

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<sup>1</sup>The Parties to this proceeding are HAWAIIAN ELECTRIC COMPANY, INC. ("HECO"), HAWAII ELECTRIC LIGHT COMPANY, INC. ("HELCO"), MAUI ELECTRIC COMPANY, LIMITED ("MECO") (collectively, HECO, HELCO, and MECO are referred to as the "HECO Companies"), KAUAI ISLAND UTILITY COOPERATIVE ("KIUC"), and the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF CONSUMER ADVOCACY (the "Consumer Advocate"), an ex officio party, pursuant to Hawaii Revised Statutes ("HRS") § 269-51 and Hawaii Administrative Rules ("HAR") § 6-61-62(a).

Additionally, the commission has granted intervenor status to the DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT, AND TOURISM ("DBEDT"), HAWAII SOLAR ENERGY ASSOCIATION ("HSEA"), RENEWABLE ENERGY ACTION COALITION OF HAWAII ("REACH"), HAWAII PV COALITION ("HPVC"), BLUE PLANET FOUNDATION ("Blue Planet"), THE ALLIANCE FOR SOLAR CHOICE ("TASC"), SUNPOWER CORPORATION ("SunPower"), LIFE OF THE LAND ("LOL"), RON HOOSON ("Mr. Hooson"), the DISTRIBUTED ENERGY RESOURCE COUNCIL OF HAWAII ("DERC"), APOLLO ENERGY CORPORATION ("Apollo"), PUNA PONO ALLIANCE

pursuant to Decision and Order No. 34924,<sup>2</sup> and, specifically: (1) approves the proposed tariff revisions to Rule Nos. 22 and 23, filed November 21, 2017; (2) approves, with modifications, the proposed tariff revisions to Rule No. 14H, filed November 21, 2017; (3) approves, with modifications, the proposed tariffs for Rule Nos. 24 and 25; and (4) instructs the HECO Companies to collaborate with stakeholders and submit a revised proposed policy and procedure for allowing Net Energy Metering ("NEM") customers to add non-export technology to their systems within thirty (30) days of this Order.

I.

BACKGROUND

On October 20, 2017, the commission issued D&O 34924, which addressed the "Technical Track" issues (Issue Nos. 3 and 4), as well as components of "Priority" issues (Issue Nos. 1 and 2), as set forth in the statement of issues in Order No. 34206.<sup>3</sup> Specifically, the commission ordered, in relevant part:

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("Puna Pono"), ULUPONO INITIATIVE LLC ("Ulupono"), and the ENERGY FREEDOM COALITION OF AMERICA, LLC ("EFCA").

<sup>2</sup>Decision and Order No. 34924, filed October 20, 2017 ("D&O 34924").

<sup>3</sup>See Order No. 34206, "Establishing Statement of Issues and Procedural Schedule for Phase 2," filed December 9, 2016 ("Order No. 34206"), at 7-8. The commission first addressed the Priority Issues in Decision and Order No. 34534, filed on

1. The commission approved the Parties' stipulation regarding: (A) Rule 14H, Appendix III, Screen 7 and (B) Rule 22, regarding issues that had been raised during the Priority stage of Phase 2, but had not been resolved by D&O 34534 (the "Deferred Issues Stipulation");<sup>4</sup>

2. The commission approved the Parties' stipulation regarding Rule 14H, Appendix I, Subparagraph A to extend the Rule 14H requirement for formal certification of Qualified Advanced Inverters from September 7, 2017, to March 10, 2018 (the "Self-Certification Stipulation");<sup>5</sup>

3. The commission denied the Parties' stipulation for a "smart export" program ("Smart Export") and instead instructed the HECO Companies to file a tariff for an interim Smart Export program consistent with the commission's findings;<sup>6</sup>

4. The commission denied the Parties' stipulation regarding activation of advanced inverter functions, and instead instructed the HECO Companies to file revisions to Rule 14H to:  
(A) activate the Volt-VAR and Frequency-Watt functions;

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May 3, 2017, but deferred a number of issues for continued discussion during the Technical Track. See Decision and Order No. 34534, filed May 3, 2017 ("D&O 34534").

<sup>4</sup>See D&O 34924 at 169-170.

<sup>5</sup>See D&O 34924 at 172-174.

<sup>6</sup>See D&O 34924 at 172 and 177-180.

(B) deactivate the Fixed Power Function; and (C) implement revisions to Rule 14H's definitions;<sup>7</sup>

5. The commission clarified that participants in the NEM program may add non-export systems without forfeiting their place in the program, provided that they upgrade their legacy inverter equipment. The HECO Companies were instructed to propose a policy and procedure to effectuate this clarification;<sup>8</sup>

6. The commission approved revisions to Rule 23, the Customer Grid-Supply ("CGS") program, specifically: (A) clarifying that to the extent any capacity remains in the program after October 21, 2017, applications for the CGS program may continue to be accepted until that capacity is depleted; and (B) modifying Rule 23 to extend the existing CGS energy credit rate for another five years;<sup>9</sup> and

7. The commission, on its own motion, established an interim "CGS+" program to "accommodate the continued gradual transition toward energy storage-based DER offerings, while continuing to recognize and address the technical and economic concerns associated with direct-to-grid PV output."<sup>10</sup>

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<sup>7</sup>See D&O 34924 at 170-171 and 185-189.

<sup>8</sup>See D&O 34924 at 174-175.

<sup>9</sup>See D&O 34924 at 175-176.

<sup>10</sup>See D&O 34924 at 139-140 and 180-185.

The HECO Companies were instructed to file proposed tariff revisions incorporating the Deferred Issues Stipulation, Self-Certification Stipulation, advanced inverter functions, and revisions to the CGS program within thirty (30) days of D&O 34924; likewise, the HECO Companies were also instructed to submit their proposed policy and procedure for allowing NEM customers to add non-export technology within thirty days of D&O 34924.<sup>11</sup> In addition, the HECO Companies were instructed to file proposed tariffs for the Smart Export program and CGS+ program within sixty (60) days of D&O 34924.<sup>12</sup>

On November 21, 2017, the HECO Companies filed their proposed revisions to Rule 14H (Interconnection of Distributed Generating Facilities with the Company's Distribution System), Rule 22 (Customer Self-Supply, "CSS"), and Rule 23 (CGS), consistent with D&O 34924.<sup>13</sup> Also on November 21, 2017, the HECO Companies filed their proposed policy and procedure for allowing NEM customers to add non-export technology,

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<sup>11</sup>See D&O 34924 at 191-192.

<sup>12</sup>See D&O 34924 at 191-193.

<sup>13</sup>Letter From: D. Brown To: Commission Re: Docket No. 2014-0192 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies; Proposed Revisions to Rules 14H, 22, and 23 Tariffs, filed November 21, 2017 ("HECO November Filing").

consistent with D&O 34924.<sup>14</sup> On December 19, 2017, the HECO Companies filed proposed tariffs for Rule 24 (CGS+) and Rule 25 (Smart Export).<sup>15</sup>

On December 22, 2017, the commission issued a letter to the Parties, inviting them to comment on the HECO Companies' proposals by January 8, 2018.<sup>16</sup>

In response to the commission's invitation, the commission received timely comments from DERC, EFCA, the Joint Parties,<sup>17</sup> and the Consumer Advocate.<sup>18</sup>

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<sup>14</sup>Letter From: D. Brown To: Commission Re: Docket No. 2014-0192 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies; Proposed Policy and Procedure for Adding to NEM Systems," filed November 21, 2017 ("HECO NEM Policy Proposal").

<sup>15</sup>Letter From: D. Brown To: Commission Re: Docket No. 2014-0192 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies; Hawaiian Electric Companies - Compliance Filing; Customer Grid Supply Plus and Smart Export Tariff Sheets, filed December 19, 2017 ("HECO December Filing").

<sup>16</sup>Letter From: Commission To: Service List Re: Comments to HECO's DER Filings - Docket No. 2014-0192; In re Public Utilities Commission, Instituting a Proceeding to Investigate Distributed Energy Resource Policies, filed December 22, 2017.

<sup>17</sup>For purposes of this Order, the "Joint Parties" refers, collectively, to Blue Planet, Hawaii PV Coalition, HSEA, Ron Hooson, LOL, PPA, and TASC.

<sup>18</sup>See "Distributed Energy Resources Council of Hawaii's Comments on HECO's DER Filings; and Certificate of Service," filed January 5, 2018 ("DER Comments"); "Energy Freedom Coalition of America, LLC's Comments on HECO's Filings Relating to Policy and Procedures for Adding Non-Exporting Facilities to an Existing NEM System; HECO's Proposed Revisions to Rules 14H, 22 and 23; and HECO's Proposed Customer Grid Supply Plus and Smart Export Tariff; and Certificate of Service," filed January 8, 2018

II.

DISCUSSION

A.

Rules 22 and 23

The commission has reviewed the HECO Companies' proposed revisions to Rules 22 and 23 and finds them to be consistent with D&O 34924. In addition, no Party has filed any comments regarding these proposed tariff revisions. Accordingly, the commission approves HECO's tariff revisions to Rule Nos. 22 and 23, as proposed.

B.

Rule 14H

Upon reviewing the HECO Companies' proposed revisions to Rule 14H, the commission finds them to be generally consistent with D&O 34924, with the following modifications:

First, regarding return-to-service range, the commission observes that the HECO Companies state that they did not remove

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("EFCA Comments"); "Blue Planet Foundation's, Hawaii PV Coalition's, Hawaii Solar Energy Association's, Ron Hooson's, Life of the Land's, Puna Pono Alliance's, and The Alliance for Solar Choice's Comments on the HECO Companies' Filings; and Certificate of Service," filed January 8, 2018 ("Joint Parties Comments"); and Letter From: Consumer Advocate To: Commission Re: Docket No. 2014-0192 - In the Matter of Public Utilities Commission Instituting a Proceeding to Investigate Distributed Energy Resource Policies, filed January 8, 2018 ("CA Comments").



the originally proposed return-to-service range on the basis of the latest draft of IEEE P1547/D7.1, issued in November 2017.<sup>19</sup> This is inconsistent with D&O 34924, in which the commission found that the HECO Companies have not sufficiently justified their proposal to narrow the return-to-service window.<sup>20</sup> The HECO Companies' November Filing does not contain any technical support for this renewed request for change, beyond stating that the November 2017 IEEE P1547 draft appears to allow a more narrow return-to-service window. Accordingly, the commission affirms that the HECO Companies have not sufficiently supported their proposal for a narrower return-to-service range. That being said, if, during the remainder of this proceeding, the HECO Companies provide sufficient support for their proposed return-to-service range, the commission is willing to reconsider this issue at that time.

Similarly, EFCA has proposed adding language to Rule 14H to incorporate a new proposed revision in the current IEEE P1547 draft, that allows DER systems to trip without limitation under specific circumstances.<sup>21</sup> EFCA states that "[i]f DERs are subject to the proposed, narrower return-to-service range and the

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<sup>19</sup>HECO November Filing, 1-2.

<sup>20</sup>See D&O 34924 at 156-157.

<sup>21</sup>See EFCA Comments at 6.

associated potential delay in reconnection, they should also be afforded the opportunity to backup their loads without limitation, provided the requirements specified above are met."<sup>22</sup> For similar reasons, the commission does not approve EFCA's proposed revisions, as: (1) the commission is not approving the HECO Companies' proposed narrower return-to-service range; and (2) EFCA's proposed "voltage ride through" provision has not been sufficiently developed in the record.<sup>23</sup>

Second, the HECO Companies' proposed Rule 14H revisions do not include specific language that was submitted as part of the Self-Certification Stipulation. Specifically, the revised Rule 14H tariff does not include the language which provides that "self-certification may continue until the 'Certification Deadline Date.'"<sup>24</sup> This was a material component of the Self-Certification Stipulation approved by D&O 34924 and should be included in the revised Rule 14H.<sup>25</sup>

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<sup>22</sup>EFCA Comments at 7.

<sup>23</sup>For example, this issue does not appear to have been raised by EFCA in conjunction with the Advanced Inverter Stipulation, filed August 7, 2017.

<sup>24</sup>See D&O 34924 at 173; see also, Self-Certification Stipulation, filed September 18, 2017.

<sup>25</sup>See D&O 34924 at 38-39 and 173 (noting that the HECO Companies originally submitted a non-docketed transmittal requesting a short-notice change to Rule 14H to extend the formal self-certification deadline from September 7, 2017, to March 10, 2018, and that, in granting the HECO Companies' request, the commission suggested that further revisions may be

The commission acknowledges the Consumer Advocate's continued concern regarding the self-certification process and that "greater efforts need to be made to inform consumers regarding their status of compliance."<sup>26</sup> However, the commission observes that until the relevant standards-setting entities (e.g., IEEE and UL) have completed their efforts and the broader industry is ready to transition fully to certified inverters, self-certification remains the only viable way to bridge the market gap and allow for continued DER deployment in Hawaii. This issue may be further examined during the Market Track of this proceeding.

In sum, HECO shall revise Rule 14H consistent with this Order and re-submit it to the commission within ten (10) days of this Order, at which time it shall take effect.

C.

Rule 24 (CGS+)

Upon reviewing the HECO Companies' proposed Rule 24 tariff, the commission finds it to be generally consistent with D&O 34924, with the following necessary modifications:

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warranted to further clarify this intent, which led to the Self-Certification Stipulation).

<sup>26</sup>CA Comments at 6.

First, regarding compensation, the HECO Companies' proposal only contains credit rates for Oahu and does not reflect the credit rates for the neighbor islands, as provided in D&O 34924.<sup>27</sup> This information should be reflected in the tariffs applicable to each island system.

Second, the proposed tariff does not clearly provide that customers have the option to utilize a third-party aggregator. While Appendix I of the CGS+ Interconnection Agreement provides for communication or control through either a utility-installed smart production meter or a separate arrangement with a third-party aggregator, this distinction is absent in the language of Section C of Rule 24. The existence of both of these options should be clearly stated in the body language of Rule 24.

In addition, information about the requirements for a third-party aggregator should be included in the tariff. The Joint Parties note that under the HECO Companies' proposal, such information would be published by the utility, at its discretion, on its website.<sup>28</sup> The commission agrees that providing information on the technical requirements and approval process for third-party aggregators is vital to developing interest and timely response to this new program and the

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<sup>27</sup>See D&O 34924 at 181.

<sup>28</sup>See Joint Parties Comments at 4.

HECO Companies should include this information in the tariff. However, the present lack of clarity around third-party aggregator requirements should not delay the availability of the CGS+ option for customers. To the extent the HECO Companies require additional time to develop and propose telemetry and control requirements, the Companies are directed to submit proposed requirements in this docket, which shall be incorporated into the tariff upon approval. Furthermore, the tariff should clarify that the costs of a third-party aggregator will be borne by the customer.<sup>29</sup>

Furthermore, the tariff should contain specific communication and control requirements. As proposed, Rule 24 does not provide details regarding communication and control features, stating that "the acceptable method(s) of implementing the Communication and Control requirements will be specified by the Company, consistent with requirements of Decision and Order No. 34924 in Docket No. 2014-0192, and made publicly available on the Company's website."<sup>30</sup> The Joint Parties, EFCA, and DERC all raise varying objections to this language.<sup>31</sup>

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<sup>29</sup>See D&O 34924 at 146 (indicating that only participants who elect to proceed with a utility control option, rather than a system aggregator, shall have the costs necessary to effectuate control covered by the utility).

<sup>30</sup>HECO December Filing, Exhibit 2 at 5

<sup>31</sup>See Joint Parties Comments at 2; EFCA Comments at 4; and DERC Comments at 5.

The HECO Companies shall provide more specific details as to how the Communication and Control requirements will be implemented, consistent with D&O 34924, in the language of the tariff. Consistent with D&O 34924, the HECO Companies shall bear the cost of metering and control of a CGS+ customer's system for customers who choose the non-aggregator option. As clarified above, for those customers who elect a third-party aggregator, they will be responsible for the costs of contracting with the system aggregator.

The commission notes that the Joint Parties have also raised issues with the "Verification Testing" proposed by the HECO Companies for both Rule 24 (CGS+) and Rule 25 (Smart Export).<sup>32</sup> However, the commission declines to adopt the Joint Parties' suggestions. The "Verification Testing" language appears substantively identical to the requirements in the existing Rule 14H (Interconnection) and Rule 23 (CGS) tariffs. This existing language was not challenged in the briefing leading up to D&O 34924, nor has it been expressly raised as an issue in the past. Given the lack of evidence in the record to support such a change, the commission declines to adopt such a change at this time. However, the commission is aware that customers who

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<sup>32</sup>See Joint Parties Comments at 2-3; see also HECO December Filing, Exhibit 1 at 27, section 2.

have invested in DER systems continue to be subject to interconnection delays.<sup>33</sup> Such delays have been ongoing for several years and the commission expects the HECO Companies to eliminate interconnection review delays concurrently with the implementation of the CGS+ and Smart Export options. Furthermore, to the extent the Parties identify further improvements to the interconnection process (including post-approval steps, such as the verification), such proposals should be discussed and brought to the commission for consideration.

Fourth, the tariff effective date should be accelerated. Both EFCA and the Joint Parties have objected to the HECO Companies' proposal to delay implementation for another sixty (60) days, with EFCA proposing a ten (10)-day timeline,<sup>34</sup> and the Joint Parties requesting that the tariffs go into effect immediately upon approval.<sup>35</sup> The commission agrees that a sixty-day timeline for the tariffs to take effect is unnecessarily long. D&O 34924 was issued on October 20, 2017; the HECO Companies were then given thirty days to propose Rule 22 and 23 revisions and sixty days to propose language for Rules 24 and 25. Since the

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<sup>33</sup>See Letter From: D. Brown: To: Commission Re: Docket No. 2014-0192 - Distributed Energy Resource Policies Investigation - Decision and Order No. 33258 Compliance Filing, filed January 31, 2018, at 45-53.

<sup>34</sup>EFCA Comments at 6.

<sup>35</sup>Joint Parties Comments at 3-4.

HECO Companies submitted their proposals, another month has passed. In addition, regarding the Smart Export program, this concept is not new, as it was originally proposed by a number of Parties, including the HECO Companies, in January 2017, as part of the examination into the Priority Issues.<sup>36</sup> Similarly, CGS+ is very similar to the existing Rule 23 (CGS) tariff, with several adjustments similar to those proposed by the HECO Companies in their Statement of Position filed in August 2017. Under the circumstances, the commission is not inclined to delay implementation of the tariffs any longer.<sup>37</sup> That being said, as discussed above, the commission is requiring certain modifications to these proposed tariffs, which will provide the HECO Companies with reasonable time to make these modifications and submit the final tariffs. As set forth in this Order, the HECO Companies shall file their revised tariffs, within ten (10) days of this Order, at which time the tariffs will take effect.

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<sup>36</sup>See Decision and Order No. 34534, filed May 3, 2017, at 15-17.

<sup>37</sup>To the extent the HECO Companies claim they need additional time to procure and integrate "the smart meter option" for the CGS+ and Smart Export programs, see HECO December Filing at 2-3, this should not prohibit them from beginning to accept and process applications.



Finally, the commission notes that the Joint Parties object to the proposed diagram for a "typical" CGS+ meter socket installation detail, as presented in Exhibit 5 to the HECO Companies' December Filing.<sup>38</sup> Specifically, the Joint Parties state that the diagram "limits customer choice and [is] overly restrictive." To the extent the Joint Parties are concerned with the potential restrictions the diagram may have on a customer's ability to install and configure their CGS+ systems, the commission observes that Exhibit 5 refers to a "typical" CGS+ meter socket installation, and does not necessarily preclude alternative configurations based on unique circumstances. The commission expects the HECO Companies to work with customers to address potential configuration issues on a case-by-case basis.

D.

Rule 25 (Smart Export)

Upon reviewing the HECO Companies' proposed Rule 25 tariff, the commission finds it to be generally consistent with D&O 34924, with the following necessary modifications.

First, as with the proposed Rule 24, the HECO Companies' proposed Rule 25 does not contain energy compensation rates for

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<sup>38</sup>See Joint Parties Comments at 5.

the neighbor islands. This should be updated to reflect the findings in D&O 34924 for each island, as applicable.<sup>39</sup>

Second, the telemetry and control requirements require clarification. Both EFCA and the Joint Parties object to the current language, arguing that it is inconsistent with D&O 34924, which expressly stated that the Smart Export program would not have a controllability aspect.<sup>40</sup> The commission agrees that D&O 34924 does not authorize smart production meters to control the output from Smart Export systems.<sup>41</sup> The HECO Companies should revise this section.

Third, the HECO Companies' proposed Rule 25 contains two Section "Ds" (Communication and Controllability, page 4, and Interconnection Process, page 5).<sup>42</sup> This should be corrected.

Fourth, consistent with the commission's discussion above regarding the tariff effective date for Rule 24 (CGS+), the effective date for Rule 25 (Smart Export) should be revised. Consistent with the effective date for the CGS+, the HECO Companies shall have ten (10) days from this Order to file their revised Rule 25, which shall be effective upon filing.

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<sup>39</sup>See D&O 34924 at 178.

<sup>40</sup>See EFCA Comments at 2-4; and Joint Parties Comments at 1-2.

<sup>41</sup>See D&O 34924 at 137 and 180.

<sup>42</sup>HECO December Filing, Exhibit 3 at 4-5.

Likewise, consistent with the discussion regarding the CGS+ program, the commission declines to adopt the Joint Parties' recommendation regarding the "Verification Testing" language to Rule 25.

E.

NEM Policy And Procedure

The commission declines to approve the HECO Companies' proposed NEM policy and procedures at this time. There are a number of issues that require further refinement and clarification.

For example, further clarification is needed regarding the HECO Companies' calculations of NEM "program size." In their proposed NEM policy, the HECO Companies state that "[f]or purposes of calculating combined NEM program size for their original NEM system and the non-export addition, the Companies intend to use the original NEM system size plus any additional panels that may be added with the non-export addition (using the lesser of the panel or inverter size)."<sup>43</sup> However, it is unclear whether the non-export technology additions will "add" to the NEM program size. In D&O 34924, the commission stated that one concern with making additions to existing NEM systems was the potential to increase

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<sup>43</sup>HECO NEM Policy Proposal at 2-3.

the NEM system's export capacity.<sup>44</sup> Accordingly, to the extent non-export technology will not increase a NEM system's export capacity, it is unclear whether, and to what extent, a non-export technology addition should be considered in determining a NEM system's contribution to "program size." In addition, on this issue, the Joint Parties note that it is unclear how the HECO Companies propose to measure kW exports.<sup>45</sup>

The HECO Companies' proposed compliance procedures also require further clarification. The HECO Companies describe "an additional check" of exported kWh based on a calculation of original NEM system size multiplied by 6 hours of sunlight per day.<sup>46</sup> The Consumer Advocate requests more clarity on this issue and also raises concerns as to how NEM customers will be notified of any violations and what procedural steps will be provided.<sup>47</sup>

The Joint Parties also note that it is unclear how the HECO Companies will conduct the interconnection reviews.<sup>48</sup>

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<sup>44</sup>See D&O 34924 at 114-115 and 174.

<sup>45</sup>See Joint Parties Comments at 6. The Joint Parties also note what appears to be a typographical error in describing the maximum export of a NEM system. See Joint Parties Comments at 5 (stating that the HECO Companies' use of the word "demand" should be replaced by the word "export.").

<sup>46</sup>See HECO Proposed NEM Policy at 3.

<sup>47</sup>See CA Comments at 4-5.

<sup>48</sup>Joint Parties Comments at 6.

Similarly, while the HECO Companies' proposal requires NEM customers who wish to add non-export technology to upgrade their legacy inverters, as required by D&O 34924,<sup>49</sup> it does not describe specific steps to ensure that customers comply with this requirement. EFCA recommends that HECO and the stakeholders work collaboratively to further develop this policy.<sup>50</sup> DERC expresses concern about the overall cost to replace legacy inverters and proposes an exception for NEM customers who install non-export technology of a limited size.<sup>51</sup>

The HECO Companies also propose an exception to the "legacy update" for NEM customers who install energy storage for "emergency back-up purposes."<sup>52</sup> The Consumer Advocate raises several concerns with this, including that such an exception is not consistent with D&O 34924 and that it may inadvertently encourage retention of legacy inverters, thereby hindering participation in future programs.<sup>53</sup>

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<sup>49</sup>See D&O 34924 at 175.

<sup>50</sup>See EFCA Comments at 7-8.

<sup>52</sup>HECO Proposed NEM Policy at 2.

<sup>53</sup>See CA Comments at 5.

Overall, the commission finds that the proposed compliance procedure is vague and should not be approved at this time. Further clarification is required, including, but not limited to, specific steps for enforcing compliance, measuring system exports, processing interconnection reviews, providing timely and transparent notice to customers, and developing a policy for upgrading legacy inverters. The commission rejects DERC's request for an exception from the requirement to upgrade legacy inverters. This would be inconsistent with D&O 34924, and would diminish the overall goal of creating an incentive for NEM customers to upgrade their legacy equipment. Regarding the HECO Companies' proposal for an exception for "emergency back-up" systems, further clarification is needed as to the definition of an "emergency back-up" system; for example, it is unclear whether this would include systems that are capable of serving host load at any time, or only in situations of disconnection from the grid.<sup>54</sup>

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<sup>54</sup>In this sense, "emergency back-up" systems may serve different purposes than other non-export technologies, such as CSS, in that they are not intended to regularly serve customer load.

Notwithstanding the Consumer Advocate's recommendation that the HECO Companies include aggregated statistics comparing historical NEM data to data from NEM plus non-export technology in the HECO Companies' DER Technical Report,<sup>55</sup> the commission will not require such reporting at this time. As acknowledged by the Consumer Advocate, such data may be affected by "other exogenous factors" and it may be impractical to attempt to report aggregated statistics at this time. That being said, the commission encourages the HECO Companies to begin collecting such data and to work with the Consumer Advocate to identify desirable data for collection and reporting.

Based on the above, the commission instructs the HECO Companies to re-visit these issues with the Parties and re-submit their proposed NEM policy and procedures following further discussion, within thirty (30) days of this Order.

### III.

#### ORDERS

##### THE COMMISSION ORDERS:

1. The HECO Companies' proposed revisions to Rule Nos. 22 and 23, submitted on November 21, 2017, are approved and shall take effect upon the date of this Order.

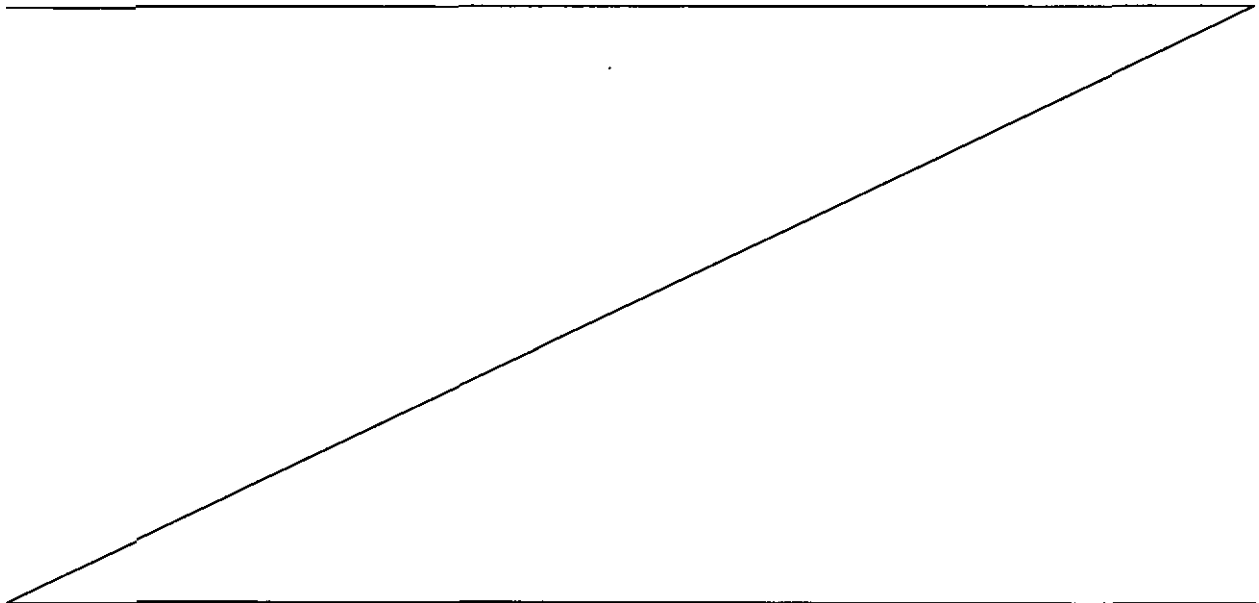
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<sup>55</sup>See CA Comments at 4.

2. The HECO Companies' proposed revisions to Rule No. 14H, submitted on November 21, 2017, are approved, subject to the modifications set forth in this Order. HECO shall file a revised Rule No. 14H with the commission within ten (10) days of this Order, at which time it shall take effect.

3. The HECO Companies' proposed Rule No. 24, submitted on December 19, 2017, is approved, subject to the modifications set forth in this Order. HECO shall file a revised Rule No. 24 with the commission within ten (10) days of this Order, at which time it shall take effect.

4. The HECO Companies' proposed Rule No. 25, submitted on December 19, 2017, is approved, subject to the modifications set forth in this Order. HECO shall file a revised Rule No. 25 with the commission within ten (10) days of this Order, at which time it shall take effect.






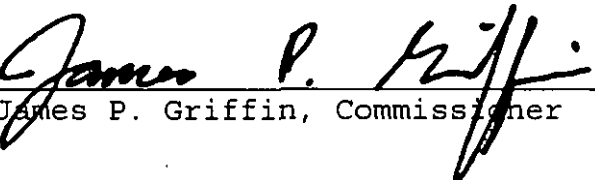
5. The HECO Companies' proposed policy and procedure for allowing NEM customers to add non-export energy storage systems, submitted on November 21, 2017, is denied. Consistent with the guidance provided in this Order, the HECO Companies shall collaborate with the Parties and re-submit a proposed policy and procedure within thirty (30) days of this Order.

DONE at Honolulu, Hawaii FEB - 5 2018

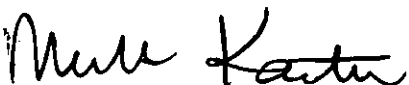
PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

By   
Randall Y. Iwase, Chair

By   
Lorraine H. Akiba, Commissioner

By   
James P. Griffin, Commissioner

APPROVED AS TO FORM:

  
Mark Kaetsu  
Commission Counsel

2014-0192.ljk

2014-0192

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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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