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BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

----- In the Matter of -----)  
 )  
 PUBLIC UTILITIES COMMISSION ) DOCKET NO. 2019-0323  
 )  
 Instituting a Proceeding to ) DECISIONS AND ORDER NO. **38681**  
 Investigate Distributed Energy )  
 Resource Policies Pertaining to )  
 The Hawaiian Electric Companies. )  
 \_\_\_\_\_ )

DECISION AND ORDER

By this Order,<sup>1</sup> the Public Utilities Commission ("Commission") finalizes Phase 2 of the Distributed Energy Resources ("DER") Program Structure ("DPS"), by addressing the

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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 "Hawaiian Electric" or "Companies") and the DIVISION OF CONSUMER ADVOCACY (the "Consumer Advocate"), an ex officio party, pursuant to Hawaii Revised Statutes ("HRS") § 269-51 and Hawaii Administrative Rules ("HAR") § 16-601-62(a). In addition, the Commission has granted Intervenor status to the HAWAII PV COALITION ("HPVC"), the DISTRIBUTED ENERGY RESOURCES COUNCIL OF HAWAII ("DERC"), and the HAWAII SOLAR ENERGY ASSOCIATION ("HSEA") (collectively, the "DER Parties"). Order No. 36777, "(1) Granting Motions to Intervene Filed By Hawaii PV Coalition, Distributed Energy Resources Council Of Hawaii, And Hawaii Solar Energy Association; (2) Dismissing Without Prejudice The Motion To Participate Filed By Itron, Inc.; (3) Enlarging Time For Itron, Inc. To File A Motion To Participate; And (4) Addressing Other Preliminary Matters," filed on November 15, 2019.

outstanding issues related to implementation of the DER Programs established in DPS Phase 1, which includes, among other things, guidance on rollout of the Smart DER and Bring Your Own Device ("BYOD") Tariffs, transition plans, and cost recovery, as discussed further herein. The Commission also extends the procedural schedule ("Third Extension of the Procedural Schedule").

I.

RELEVANT PROCEDURAL BACKGROUND

On September 24, 2019, the Commission opened this proceeding to investigate the technical, economic, and policy issues associated with DER and rate design, as they pertain to Hawaiian Electric.<sup>2</sup> In doing so, the Commission observed that this proceeding would continue the work begun in Docket Nos. 2014-0192 and 2015-0412, which investigated policies and programs for customer sited DER and customer grid service offerings.

On April 9, 2020, the Commission issued D&O No. 37066, wherein the proceeding was organized into three major categories, or "Tracks", of work: (1) DER Programs ("Program Track");

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<sup>2</sup>Order No. 36538, "Opening the Docket," filed on September 24, 2019 ("Order No. 36538").

(2) Advanced Rate Design ("ARD Track"); and (3) Technical Issues ("Technical Track").<sup>3</sup>

D&O No. 37066 also established primary objectives for each Track. The primary objectives for the Program Track are to design and implement long-term DER programs and develop a transition plan for interim DER programs (e.g., Customer Grid Supply, Customer Grid Supply Plus, Customer Self Supply, and Smart Export).<sup>4</sup>

A detailed procedural history from April 3, 2020, to September 10, 2020, is available in Order No. 37327,<sup>5</sup> and a detailed procedural history from September 28, 2020, to January 13, 2022, is available in D&O No. 38196.<sup>6</sup>

On January 25, 2022, the Commission initiated Phase 1 of the DPS, which included amendments to the Scheduled Dispatch Program ("SDP"); creating the foundation for the Basic DER Tariff Offering, the "Smart DER Tariff;" establishment of the Advanced DER Tariff offering, the "BYOD Tariff;" and establishment

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<sup>3</sup>Decision and Order No. 37066, "Establishing Procedural Details and Modifying Hawaiian Electric's Customer Grid Supply Plus Program for Hawaii Island," filed on April 9, 2020 ("D&O No. 37066").

<sup>4</sup>D&O No. 37066 at 9-10.

<sup>5</sup>Order No. 37327, "Establishing Procedural Details for the DER Program Track," filed on September 28, 2020, at 3-8.

<sup>6</sup>Decision and Order No. 38196, filed on January 25, 2022 ("D&O No. 38196"), at 4-10.

of the Guidance for the Transition of DER Programs.<sup>7</sup> The Commission further ordered the commencement of Phase 2 of the DPS, which detailed the issues to be addressed, the schedule for that portion of the proceeding, and the Parties' submission of a stipulated proposal to address the concerns identified in the Statement of Issues and the convening of a Technical Conference.<sup>8</sup> Specifically, the Statement of Issues included, but were not limited to the following:

1. Whether the Parties can come to consensus on the appropriate export compensation methodology for the Smart DER Tariff.
  - a. Whether export credits should have an expiration date, and if not, whether compensating customers at a lower rate for excess export credits is appropriate.
2. Whether the Parties can come to consensus on the appropriate methodology for establishing customer compensation for the BYOD Tariff and whether the use of a hybrid incentive (i.e., upfront payment and monthly payments) approach to delivering customer compensation is appropriate. If the hybrid approach is not appropriate, then identifying whether there is an approach to which the Parties can come to consensus.
  - a. Whether Hawaiian Electric should establish a methodology to measure annual performance of customer devices and potentially develop a true-up mechanism to inform customer compensation determinations.

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<sup>7</sup>D&O No. 38196 at 33.

<sup>8</sup>D&O No. 38196 at 51-52.

3. Whether a substantial number of existing DER customers already have advanced meters, and whether the requirement for Smart DER Tariff and BYOD Tariff customers to enroll in [time-of-use ("TOU") rates] will be impacted by the plan for the Grid Modernization rollout of advance metering infrastructure ("AMI").<sup>9</sup>

The Parties were also directed to address the following issues in their stipulated filing:

1. Whether the [Standard Interconnection Agreement ("SIA")] tariff should remain open to new customers, and if not, whether existing SIA customers should be required to transition to the Smart DER Tariff, Non-Export Rider.
2. Whether legacy [demand response ("DR")] programs should require transition to permanent DER programs.
3. Whether Hawaiian Electric's cost recovery request for its [Customer Interconnection Tool ("CIT")] system update expenses warrants approval, amendment, or denial.
4. Whether Hawaiian Electric should be able to implement an [Interconnection Application Fee ("IAF")], and if so, whether the fee schedule proposed by Hawaiian Electric is the appropriate fee schedule to implement.
  - a. Whether the IAF, if established, should contribute to Hawaiian Electric's CIT system update costs, as driven by SDP and other DER program updates.
5. Whether the Virtual Net Metering Program Pilot is an appropriate undertaking for the utility.
6. Whether requiring an advanced meter and TOU enrollment for new DER Programs will be impacted by the timeline of AMI rollout and

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<sup>9</sup>D&O No. 38196 at 51.

ARD establishment, and if so, whether the Parties can identify an appropriate mitigation approach that can be readily implemented.<sup>10</sup>

Subsequently, on February 14, 2022, the Commission amended the procedural schedule that was established for DPS Phase 2 in D&O No. 38196 to provide the Parties additional time to prepare for the Technical Conference and to facilitate further dialogue and collaboration amongst the Parties in anticipation of reaching full agreement.<sup>11</sup>

Pursuant to Order No. 38231, a Technical Conference was held on March 15, 2022.<sup>12</sup> Thereafter, the Commission issued a letter providing further guidance for the Parties in anticipation of the filing of their stipulated DPS Phase 2 proposals.<sup>13</sup>

However, on April 19, 2022, Hawaiian Electric, the Consumer Advocate, and the DER Parties each filed their separate DPS Phase 2 Proposals, addressing the remaining issues as identified in D&O No. 38196.<sup>14</sup>

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<sup>10</sup>D&O No. 38196 at 52.

<sup>11</sup>Order No. 38231, "Amending the Procedural Schedule," filed on February 14, 2022 ("Order No. 38231"), at 2.

<sup>12</sup>Order No. 38231 at 2.

<sup>13</sup>Letter From: Commission To: Service List Re: Docket No. 2019-0323, In re Public Utilities Commission, Instituting a Proceeding to Investigate Distributed Energy Resource Policies - "Guidance for Program Track Phase Two Issues Following the March 15th Technical Conference," filed on April 1, 2022.

<sup>14</sup>Letter From: K. Shinsato To: Commission Re: Docket

As a result, the Commission issued information requests ("IRs") to the Parties on May 10, 2022, regarding the separate Phase 2 Proposals,<sup>15</sup> to which the Parties timely responded on May 24, 2022.<sup>16</sup>

Pursuant to D&O No. 38196, Hawaiian Electric filed its DER Program Transition Plan on June 30, 2022.<sup>17</sup>

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No. 2019-0323 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies; "Hawaiian Electric's Proposal on the Remaining Issues; Identified in Decision and Order No. 38196," filed on April 19, 2022 ("Hawaiian Electric's Phase 2 Proposal"); "Division of Consumer Advocacy's Comments and Recommendations on the Remaining Issues Identified in Decision and Order No. 38196," filed on April 19, 2022 ("Consumer Advocate's Phase 2 Proposal"); and "Hawaii PV Coalition's, Hawaii Solar Energy Association's and Distributed Energy Resources Council of Hawaii's Proposal on Phase 2 Remaining Issues," filed on April 19, 2022 ("DER Parties' Phase 2 Proposal").

<sup>15</sup>Letter From: Commission To: D. Matsuura, B. Argetsinger, C. Debone, I. Moriwake, and Consumer Advocate Re: Docket No. 2019-0323 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining to the Hawaiian Electric Companies, filed on May 10, 2022.

<sup>16</sup>"Division of Consumer Advocacy's Response to the Public Utilities Commission's Submission of Information Request, Filed on May 10, 2022," filed on May 24, 2022 ("Consumer Advocate's Response to PUC-CA-IR-\_\_"); Joint Letter From: B. Argetsinger, C. DeBone, and I. Moriwake To: Commission Re: Docket No. 2019-0323 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining to the Hawaiian Electric Companies; DER Parties' Response to PUC-DER-IR-126 to PUC-DER-IR-130, filed on May 24, 2022 ("DER Parties' Response to PUC-DER-IR-\_\_"); and Letter From: Y. Kawanami To: Commission Re: Docket No. 2019-0323 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies; Hawaiian Electric's Responses to PUC-HECO-IRs 163-169, filed on May 24, 2022 ("Hawaiian Electric's Response to PUC-HECO-IR-\_\_").

<sup>17</sup>Letter From: K. Shinsato To: Commission Re: Docket

Pursuant to the deadlines set forth in D&O No. 38196 and Order No. 38231, and the sufficiency of the information presented in this proceeding, the remaining issues addressed in the DPS Phase 2 proposals are ready for decision-making.

II.

DPS PHASE 2 PARTY POSITIONS

A.

Hawaiian Electric's Proposal

In its proposal, Hawaiian Electric explains that "[w]hile the Parties have been able to reach conceptual agreement in many areas, several issues remain where the Parties have not been able to reach agreement."<sup>18</sup> Accordingly, Hawaiian Electric provides its proposal, but also notes areas where the Parties could agree or where agreement was not reached.<sup>19</sup>

Export Compensation Methodology for the Smart DER Tariff. Hawaiian Electric proposes that, in order to allow time for the Companies to build the Smart DER Tariff into its billing system and CIT, the Smart DER Tariff should not be implemented

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No. 2019-0323 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies; Hawaiian Electric's DER Program Transition Plan, filed on June 30, 2022 ("DER Program Transition Plan").

<sup>18</sup>Hawaiian Electric's Phase 2 Proposal at 1.

<sup>19</sup>Hawaiian Electric's Phase 2 Proposal at 1.

until after the Companies complete the Grid Needs Assessment (“GNA”) and a revised calculation of export compensation rates.<sup>20</sup> Hawaiian Electric also asserts that such timing will also allow for the Commission to make a decision in the ARD Track and help avoid higher costs associated with providing LTE cellular meters to DER customers in advance of full deployment of mesh meters through the AMI rollout.<sup>21</sup>

Alternatively, should the Commission not agree with its recommendation, Hawaiian Electric proposes the following Smart DER export compensation schedule in cents/kilowatt hours (“kWh”):<sup>22</sup>

**Table 1: Average (2025-2031) Export Credit Rate without Revenue Requirements, Nominal Dollars, cents/kWh**

<b>Island</b>	<b>Off-Peak (10pm-9am)</b>	<b>Midday (9am-5pm)</b>	<b>On-Peak (5pm-10pm)</b>
<b>Oahu</b>	12	11	13
<b>Hawaii</b>	12	9	13
<b>Maui</b>	12	6	13
<b>Molokai</b>	21	17	22
<b>Lanai</b>	22	16	23

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<sup>20</sup>Hawaiian Electric’s Phase 2 Proposal at 2.

<sup>21</sup>Hawaiian Electric’s Phase 2 Proposal at 2.

<sup>22</sup>Hawaiian Electric’s Phase 2 Proposal at 3. Hawaiian Electric explains that the rates were developed based on analysis it previously committed to at the Technical Conference on March 15, 2022, which included one adjustment to the DER Parties’ suggested methodology that was to “convert the DER Parties’ RESOLVE averaged marginal costs from revenue requirements to costs, and convert them from 2018 year dollars to nominal year dollars.” Id.

Expiration of Export Credits. Hawaiian Electric maintains that export credits should be treated differently, based on the level of dispatchability of the customer's system.<sup>23</sup> To support the safe and reliable export of generation, in a manner that is cost beneficial for all utility customers, the Companies state that they are "not willing to pay for excess export credits for customers' unmanaged, discretionary exports, but is willing to continue incentives (without forfeiture) for customers whose systems the Companies can dispatch."<sup>24</sup>

Customer Compensation for the BYOD Tariff. Hawaiian Electric recommends that the GNA and ARD decision be completed prior to establishing customer compensation for the BYOD Tariff, in order to facilitate a full evaluation of the system benefits.<sup>25</sup> In the alternative, Hawaiian Electric proposes the following program structure and incentives for BYOD Levels 1, 2, and 3:<sup>26</sup>

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<sup>23</sup>Hawaiian Electric's Phase 2 Proposal at 4.

<sup>24</sup>Hawaiian Electric's Phase 2 Proposal at 4.

<sup>25</sup>Hawaiian Electric's Phase 2 Proposal at 5.

<sup>26</sup>Hawaiian Electric's Phase 2 Proposal at 5-6.

**Table 2: Hawaiian Electric’s Alternative BYOD Program Proposal**

	<b>BYOD Level 1</b>	<b>BYOD Level 2</b>	<b>BYOD Level 3</b>
<b>Program Type</b>	Flexible User Dispatch	Utility Dispatch	System Grid Services
<b>Target Grid Services</b>	Capacity Load Reduction	Capacity Load Reduction	Capacity Load Shift (Build + Reduce)
<b>Program Cap</b>	Oahu - 10 MW Hawaii - 2 MW Maui - 2 MW Lanai - 200 kW Molokai - 200 kW	Oahu - 20 MW Hawaii - 5 MW Maui - 5 MW Lanai - 500 kW Molokai - 500 kW	Oahu - 40 MW Hawaii - 10 MW Maui - 10 MW Lanai - 750 kW Molokai - 750 kW
<b>Max Number of Events</b>	365	156	156
<b>Response Time</b>	Scheduled	Immediately upon dispatch signal issuance.	Day-ahead notice
<b>Duration</b>	2-hour	1-hour	2-hour build + 2-hour reduce
<b>Communication</b>	None	Wi-fi, Wired, or Cellular	Wi-fi, Wired, or Cellular
<b>Comm Protocol</b>	None	Open ADR2.0b, IEEE2030.5	Open ADR2.0b, IEEE2030.5
<b>Operational Requirements</b>	Similar to Battery Bonus	Similar to legacy DR programs.	Similar to GSPA but with day ahead notice.
<b>Upfront Incentive</b>	\$0/kW	\$250/kW	\$250/kW
<b>Monthly Incentive</b>	\$2.50/kWh	\$2/kWh	\$2/kWh
<b>Customer Commitment</b>	No time commitment	10 years	10 years

Annual Performance of Customer Devices.

Hawaiian Electric proposes assessing performance by auditing participating customers using AMI meter data, rather than establishing a methodology for measuring annual performance.<sup>27</sup> Further, the Companies indicate that they are amenable to

<sup>27</sup>Hawaiian Electric’s Phase 2 Proposal at 7.

evaluating the DER Parties' Proposal to focus on export amounts only, rather than a customer's baseline energy usage, and engage in collaborative efforts with the docket Parties in developing an auditing process for the BYOD Tariff.<sup>28</sup>

Smart DER and BYOD Tariffs - TOU Enrollment.

The Companies support the alignment of the Smart DER and BYOD Tariffs with the expected completion of the Companies' full AMI deployment in the third quarter of 2024.<sup>29</sup> Hawaiian Electric notes that opening the Smart DER and BYOD Tariffs prior to full AMI deployment may require the deployment of cellular meters to customers who have not received advanced meters, rather than the less expensive advanced mesh network meters that the Companies plan to deploy.<sup>30</sup> Given the cost issue and that the Commission directed Hawaiian Electric to implement the BYOD Tariff no later than July 2023, Hawaiian Electric is willing to commit to providing new DER customers who enroll in the Smart DER and BYOD Tariffs with an AMI meter, conditioned on the start of the Smart DER Tariff coinciding with the start of the BYOD Tariff in July 2023.<sup>31</sup>

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<sup>28</sup>Hawaiian Electric's Phase 2 Proposal at 7.

<sup>29</sup>Hawaiian Electric's Phase 2 Proposal at 8.

<sup>30</sup>Hawaiian Electric's Phase 2 Proposal at 8-9.

<sup>31</sup>Hawaiian Electric's Phase 2 Proposal at 9.

Standard Interconnection Agreement Tariff.

Hawaiian Electric supports allowing existing SIA Tariff customers to remain on the tariff, but recommends closing the tariff to new customers while also allowing existing SIA customers to transition to the new DER programs, once the Smart DER Tariff becomes effective.<sup>32</sup> Conversely, if the SIA Tariff remains open to new customers, Hawaiian Electric proposes that the interconnection requirements for the SIA Tariff be revised to align with those developed for the Smart DER Tariff.<sup>33</sup>

Legacy Demand Response Programs. The Companies identify the legacy DR programs that are being considered for transition as the Residential Direct Load Control, Small and Medium Business Direct Load Control, Commercial and Industrial Direct Load Control, and Fast DR programs.<sup>34</sup> Hawaiian Electric recommends that these legacy DR programs should transition to future DER programs after the completion of AMI deployment in the third quarter of 2024.<sup>35</sup> Moreover, Hawaiian Electric notes that these programs are

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<sup>32</sup>Hawaiian Electric's Phase 2 Proposal at 9-10.

<sup>33</sup>Hawaiian Electric's Phase 2 Proposal at 10.

<sup>34</sup>Hawaiian Electric's Phase 2 Proposal at 10.

<sup>35</sup>Hawaiian Electric's Phase 2 Proposal at 10.

being used by system operators currently and will be a valuable load management resource given the AES coal plant retirement.<sup>36</sup>

Cost Recovery for CIT System Updates. Hawaiian Electric indicates that it is withdrawing its request to seek surcharge cost recovery for the CIT system update.<sup>37</sup>

Interconnection Application Fee. Hawaiian Electric contends that a nominal fee should be charged to access the benefits of CIT, in accordance with the practice in other jurisdictions.<sup>38</sup> Accordingly, Hawaiian Electric proposes a \$100 fee to implement the IAF to reflect the magnitude of the annual cost of enhancing the CIT, including through adding new programs to its functionality.<sup>39</sup>

Virtual Net Metering Program Pilot. Hawaiian Electric supports the exploration of a Virtual Net Metering Program Pilot that may offer benefits to expand access to DER to low- and moderate-income customers, as well as those who are unable to host DER on their own property.<sup>40</sup> The Companies stress their support for a pilot program and highlight their intent to develop a Notice

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<sup>36</sup>Hawaiian Electric's Phase 2 Proposal at 10.

<sup>37</sup>Hawaiian Electric's Phase 2 Proposal at 11.

<sup>38</sup>Hawaiian Electric's Phase 2 Proposal at 11.

<sup>39</sup>Hawaiian Electric's Phase 2 Proposal at 11.

<sup>40</sup>Hawaiian Electric's Phase 2 Proposal at 11-12.

of Intent for such pursuant to the Innovation Pilot Framework established in the Performance Based Regulation ("PBR") docket prior to establishing a full scale program.<sup>41</sup>

B.

DER Parties' Proposal

Export Compensation Methodology for the Smart DER Tariff. The DER Parties' proposal provides a framework for rolling out the Smart DER and BYOD Tariffs without delay, making use of proxy incentives and metrics where necessary and building in mechanisms to update the compensation rates and capacities when better information is available.<sup>42</sup> For the Smart DER Tariff's export compensation rate methodology, the DER Parties propose to compare the "DER freeze" case in RESOLVE to two scenarios: (1) the base case; and (2) the base case with the high fuel cost forecast over a ten-year period, then average the avoided costs between each comparison case to determine the export rate for each island.<sup>43</sup> The DER Parties request that the Commission direct Hawaiian Electric to conduct this analysis expeditiously for the initial rates for the Smart DER Tariff and file the results along

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<sup>41</sup>Hawaiian Electric's Phase 2 Proposal at 12.

<sup>42</sup>DER Parties' Phase 2 Proposal at 5-8.

<sup>43</sup>DER Parties' Phase 2 Proposal at 5.

with several discussion items related to the RESOLVE methodology and assumptions employed, which could be adjusted with future Integrated Grid Planning ("IGP") cycles using the same methodology.<sup>44</sup> Customers would lock in their rate for ten-year, successive periods.<sup>45</sup> As an alternative, the DER Parties note that the Commission could adopt the export credit rates resulting from their previous analysis, which is essentially the same as what Hawaiian Electric presented above, plus a 20% on-peak adder.<sup>46</sup>

Expiration of Export Credits. The DER Parties propose that export credits not used in one month should roll forward monthly, and at the end of the annual period, Hawaiian Electric would issue a check for the value of the remaining credits to each customer (or applicable entity).<sup>47</sup>

Customer Compensation for the BYOD Tariff and Annual Performance of Customer Devices. The following details the DER Parties' proposal for BYOD Levels 1, 2, and 3, including the proposed performance methodology for each level:<sup>48</sup>

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<sup>44</sup>DER Parties' Phase 2 Proposal at 5-7.

<sup>45</sup>DER Parties' Phase 2 Proposal at 5.

<sup>46</sup>DER Parties' Phase 2 Proposal at 8.

<sup>47</sup>DER Parties' Phase 2 Proposal at 9-10.

<sup>48</sup>DER Parties' Phase 2 Proposal at 14-15.

**Table 3: Services Matrix for BYOD Tariff Levels 1, 2, and 3**

	BYOD FFR	BYOD Level 1	BYOD Level 2	BYOD Level 3-365	BYOD Level 3-365
<b>Target Grid Services</b>	<b>Fast Frequency Response</b>	<b>Scheduled Dispatch Capacity Load Reduction</b>	<b>Utility Dispatch Capacity Load Reduction</b>	<b>365 System Grid Service Load Shift Capacity</b>	<b>365 System Grid Service Remote Scheduled Dispatch</b>
<b>California Phase 3 Smart Inverter functions to enable</b>	Proprietary Hawaii Response Function	n/a	Function 1 Monitor Key Data, Function 4 Set Active Power, Function 8 Scheduling Power Values and Modes	Funct. 1 Monitor Key Data, Funct. 3 Limit Maximum Active Power Mode for Load Build, Funct. 4 Set Active Power, Funct. 8 Scheduling Power Values for Load Reduce	Function I Monitor Key Data, Function 4 Set Active Power and Function 8 Scheduling Power Values
<b>Program Cap</b>	Oahu - 70 MW Hawaii - 17 MW Maui - 17 MW Lanai - 1.45 MW Molokai - 1.45 MW				
<b># of events</b>	n/a	365	156	365	365
<b>Duration and/or Period</b>	30 minutes	2-hour peak	1-2 hours peak	2-4 hours midday & evening ramp	2-4 hours peak
<b>Comms</b>	n/a	None	Customer Internet or Cellular	Customer Internet or Cellular	Customer Internet or Cellular
<b>Comms Protocol</b>	n/a	None	Open ARD2.0b, IEEE 2030.5, Dispatch Agents	Open ARD2.0b, IEEE 2030.5, Dispatch Agents	Open ARD2.0b, IEEE 2030.5, Dispatch Agents
<b>Operational Requirement</b>	Like GPSA, battery frequency trigger and capacity response based on GSPA	Same as SDP	24-hour day ahead schedule with emergency remote dispatch	24-hour day ahead schedule with emergency remote dispatch	24-hour day ahead schedule with emergency remote dispatch
<b>Customer Commitment</b>	10 years	10 years	10 years	10 years	10 years
<b>1:1 retail credit for controlled energy exports</b>	yes	yes	yes	yes	yes

<b>Dispatched Credit Rationale</b>	Remove customer participation disincentive to coordinate customer assets with grid needs.	Remove customer participation disincentive to coordinate customer assets with grid needs.	Remove customer participation disincentive to coordinate customer assets with grid needs.	Dispatchable load build creates economic uncertainty for participants; retail export credit ensures HECO fully utilizes resources.	Remove customer participation disincentive to coordinate customer assets with grid needs.
<b>Performance true-up</b>	Utility meter measured export. Battery data if device response is in question by HECO based on meter data	Utility meter measured export. Battery data if device response is in question by HECO based on meter data	Utility meter measured export. Battery data if device response is in question by HECO based on meter data	None unless device is not communicating or responding to dispatch as HECO is responsible to manage charge/discharge	Utility meter measured export. Battery data if device response is in question by HECO based on meter data
<b>Upfront Incentive</b>	None, but must participate in BYOD 1, 2, or 3	\$500/kW	\$500/kW	\$850/kW battery capacity committed	\$850/kW battery capacity committed
<b>Monthly Incentive</b>	\$5/kW battery capacity committed	\$5/kW + \$5/kW with FFR	\$5/kW + \$5/kW with FFR	\$8/kW battery capacity committed + \$5/kW with FFR	\$8/kW battery capacity committed + \$5/kW with FFR

Additionally, the DER Parties propose that once 75% of the program cap is filled for each service territory, the Companies will update the program cap and compensation value for subsequent enrollees using a permanent methodology that is indexed to current avoided cost projections using a combination of RESOLVE, PLEXOS, PSSE, PSCAD, ASPEN, or other appropriate modeling tools to determine values for the respective BYOD Level 1, 2, and 3 services.<sup>49</sup>

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<sup>49</sup>DER Parties' Phase 2 Proposal at 25.

Smart DER and BYOD Tariffs - TOU Enrollment. To allow for the timely and smooth launch of the Smart DER and BYOD Tariffs, the DER Parties request that the Commission remove, suspend, or defer the requirement that Smart DER and BYOD Tariff customers enroll in TOU rates until such time that all customers have access to AMI and the ability to enroll in TOU rates.<sup>50</sup> The DER Parties further recommend that customers who enroll prior to full AMI rollout have the option to switch to TOU once available for ten years after the AMI rollout is complete and TOU is available to all customers.<sup>51</sup>

Standard Interconnection Agreement Tariff. The DER Parties believe that the SIA Tariff should remain open to new customers and that existing customers should be allowed to transition to the Smart DER Tariff at their discretion.<sup>52</sup>

Legacy DR Programs. While open to the possibility of transitioning legacy DR programs to DER programs, the DER Parties raise several concerns to be addressed before implementation of any such transitions, including compensation structure for non-interconnected resources, the operational characteristics of

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<sup>50</sup>DER Parties' Phase 2 Proposal at 30-31.

<sup>51</sup>DER Parties' Phase 2 Proposal at 31.

<sup>52</sup>DER Parties' Phase 2 Proposal at 32-33.

legacy DR resources, and the baselining of customer performance.<sup>53</sup> Accordingly, the DER Parties propose that the legacy DR programs continue while concerns are addressed and the details for such transitions are developed.<sup>54</sup>

Cost Recovery for CIT System Updates. The DER Parties express their general support for cost recovery for investments that enable DER interconnection and operation, but acknowledge the Companies' withdrawal of the request for cost recovery for CIT system updates.<sup>55</sup>

Interconnection Application Fee. The DER Parties recommend that the Companies' request to establish the IAF should be denied at this time, pending further information and investigation as to how the fee would be directly tied to customer-specific costs and whether there are other avenues for Hawaiian Electric to recover these expenses through their baseline revenue and cost recovery structure.<sup>56</sup>

Virtual Net Metering Program Pilot. The DER Parties maintain that Hawaiian Electric should establish a Virtual Net Metering Program, also referred to as the Virtual Self-Consumption

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<sup>53</sup>DER Parties' Phase 2 Proposal at 33-34.

<sup>54</sup>DER Parties' Phase 2 Proposal at 34.

<sup>55</sup>DER Parties' Phase 2 Proposal at 34.

<sup>56</sup>DER Parties' Phase 2 Proposal at 35.

Program for multi-family dwellings, but do not believe that a pilot is necessary as the concept has been proven in other jurisdictions, such as California.<sup>57</sup>

C.

Consumer Advocate's Proposal

The Consumer Advocate explains that, although the Parties were not able to reach consensus and submit a stipulated proposal, it strove to better understand the Parties' positions and their impacts.<sup>58</sup>

Export Compensation Methodology for the Smart DER Tariff. The Consumer Advocate agrees with Hawaiian Electric's position that the Smart DER Tariff should not be implemented until after the completion of the GNA and a decision has been rendered on ARD.<sup>59</sup> If the Commission is not inclined to adopt this recommendation, the Consumer Advocate alternatively recommends that the Smart DER Tariff values and time periods for export compensation rates should be reevaluated once the GNA is completed and the TOU rates have been implemented.<sup>60</sup> The Consumer Advocate

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<sup>57</sup>DER Parties' Phase 2 Proposal at 36-37.

<sup>58</sup>Consumer Advocate's Phase 2 Proposal at 5.

<sup>59</sup>Consumer Advocate's Phase 2 Proposal at 8.

<sup>60</sup>Consumer Advocate's Phase 2 Proposal at 9-10.

emphasizes that tariffs include language that clearly informs customers that such tariffs and rate design are subject to change.<sup>61</sup> The Consumer Advocate stresses the importance of considering the impact of such rates on non-participating customers.<sup>62</sup>

Expiration of Export Credits. The Consumer Advocate does not believe that export credits should be allowed to accumulate indefinitely.<sup>63</sup> However, the Consumer Advocate states that it is "open to customers receiving export credits in excess of consumption if the export pricing appropriately reflects expected system avoided costs."<sup>64</sup> The Consumer Advocate indicates that it is open to further discussions on how to address its ongoing concerns about unlimited and uncontrolled amounts of DER exports and establishing an approach that aligns grid service export credits with system avoided costs.<sup>65</sup>

Customer Compensation for the BYOD Tariff. The Consumer Advocate agrees with Hawaiian Electric's recommendation that the GNA and ARD decision be completed prior to

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<sup>61</sup>Consumer Advocate's Phase 2 Proposal at 9.

<sup>62</sup>Consumer Advocate's Phase 2 Proposal at 10.

<sup>63</sup>Consumer Advocate's Phase 2 Proposal at 10.

<sup>64</sup>Consumer Advocate's Phase 2 Proposal at 10.

<sup>65</sup>Consumer Advocate's Phase 2 Proposal at 11.

establishing customer compensation for the BYOD Tariff.<sup>66</sup> Moreover, the Consumer Advocate indicates its strong support for requiring Smart DER Tariff and BYOD Tariff customers to be enrolled in TOU in order to further incentivize their participation in these programs.<sup>67</sup> The Consumer Advocate also notes that compensation rates should be revisited to assess the impact of TOU rates on participant behavior.<sup>68</sup>

With respect to BYOD Levels 2 and 3, the Consumer Advocate contends that further discussion is necessary to address issues, such as the selection of program parameters and compensation, and that the completion of the GNA and implementation of TOU rates will play an important role in informing the valuation of these programs.<sup>69</sup> The Consumer Advocate states that any proposal should “clearly demonstrate and support, for example, how much additional value the utility can gain from direct system control and dispatch relative to scheduled dispatch, as well as the incremental value associated with system grid service needs.”<sup>70</sup>

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<sup>66</sup>Consumer Advocate’s Phase 2 Proposal at 12.

<sup>67</sup>Consumer Advocate’s Phase 2 Proposal at 13.

<sup>68</sup>Consumer Advocate’s Phase 2 Proposal at 13.

<sup>69</sup>Consumer Advocate’s Phase 2 Proposal at 14.

<sup>70</sup>Consumer Advocate’s Phase 2 Proposal at 14.

The Consumer Advocate is, however, open to the use of upfront and/or monthly payments, but the Consumer Advocate emphasizes such hybrid incentive “should not exceed the incremental system-wide benefits provided. Otherwise, the program will result in higher costs and inequitable transfer payments from non-participating customers to participants.”<sup>71</sup>

Annual Performance of Customer Devices.

Regarding performance measurements of DER programs in general, the Consumer Advocate expresses its support for measures designed to help ensure expected services under DER programs and recommends the Commission “adopt language that provides guidance and clarity that there is an expectation that services are delivered, regardless of whether it is provided by the utility or third parties.”<sup>72</sup> The Consumer Advocate raises the concern that, “absent clear guidance, the Commission may be required to approve redundant programs or projects due to uncertainty whether services will be delivered as expected.”<sup>73</sup> Regarding the use of a “baseline approach to assess the [sic] whether the targeted grid services have been provided,” the Consumer Advocate emphasizes the

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<sup>71</sup>Consumer Advocate’s Phase 2 Proposal at 14.

<sup>72</sup>Consumer Advocate’s Phase 2 Proposal at 15.

<sup>73</sup>Consumer Advocate’s Phase 2 Proposal at 15.

importance of establishing proper baselines “to avoid overcompensation and free rider issues.”<sup>74</sup>

Smart DER and BYOD Tariffs - TOU Enrollment.

The Consumer Advocate indicates that it does not object to Hawaiian Electric’s recommendation to align the Smart DER Tariff with the start of the BYOD Tariff in July 2023,<sup>75</sup> in consideration of the full AMI deployment expected in the third quarter of 2024 and cost issues associated with providing cellular meters to DER customers who have not yet received mesh meters through the AMI deployment. However, should the Commission disagree with this approach, the Consumer Advocate advises that:

[T]he tariff language should include clear guidance that rates will be subject to change and that any grandfathering should be limited in nature to avoid exacerbating customer equity issues longer than necessary (and also recognizing that, if later analysis suggests that applicable tariffs may need to increase, such changes would be effective upon adoption.<sup>76</sup>

Standard Interconnection Agreement Tariff.

The Consumer Advocate notes that new DER tariffs will allow for the installation of larger sized distribution systems, and that that closing the SIA Tariff would allow for better consistency and

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<sup>74</sup>Consumer Advocate’s Phase 2 Proposal at 15.

<sup>75</sup>Consumer Advocate’s Phase 2 Proposal at 16-17.

<sup>76</sup>Consumer Advocate’s Phase 2 Proposal at 17.

review.<sup>77</sup> However, the Consumer Advocate maintains that the SIA tariff should also be evaluated in the microgrid proceeding.<sup>78</sup>

Legacy DR Programs. The Consumer Advocate supports the transition of legacy DR programs to permanent DR programs that better reflect fair designs and system costs, pending additional discussions among the Parties to address technical issues and cost-effectiveness of transitioning these programs.<sup>79</sup>

Cost Recovery for CIT System Updates. The Consumer Advocate does not object to Hawaiian Electric's withdrawal of the request for cost recovery for CIT system updates.<sup>80</sup>

Interconnection Application Fee. The Consumer Advocate notes that it is supportive of implementing an IAF for DER applications, pending the receipt of additional information that was requested from Hawaiian Electric regarding the level of ongoing expenses and full usage of the CIT.<sup>81</sup>

Virtual Net Metering Program Pilot. The Consumer Advocate supports the establishment of a pilot

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<sup>77</sup>Consumer Advocate's Phase 2 Proposal at 17-18.

<sup>78</sup>Consumer Advocate's Phase 2 Proposal at 18.

<sup>79</sup>Consumer Advocate's Phase 2 Proposal at 18.

<sup>80</sup>Consumer Advocate's Phase 2 Proposal at 19.

<sup>81</sup>Consumer Advocate's Phase 2 Proposal at 19.

program to address issues with the Virtual Net Metering Program (also referred to as the Virtual Self Consumption Program) and overlapping matters with other programs and dockets, including but not limited to the Community Based Renewable Energy and Microgrid Tariffs dockets.<sup>82</sup>

### III.

#### HAWAIIAN ELECTRIC'S ADDITIONAL DER PLANS

##### A.

#### DER Program Transition Plan

Pursuant to D&O No. 38196, Hawaiian Electric submitted its DER Program Transition Plan ("PTP"), which addresses the Commission's guidance for transitioning from interim to permanent or long-term DER programs. In developing this DER PTP, Hawaiian Electric indicates that it held multiple discussions and received input from the Consumer Advocate and DER Parties.<sup>83</sup>

First, Hawaiian Electric recommends extending the sunset date of interim export programs to three months after the effective date of the Smart DER and BYOD Tariffs, which it further suggests

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<sup>82</sup>Consumer Advocate's Phase 2 Proposal at 19-20.

<sup>83</sup>DER Program Transition Plan at 1.

should be July 2023.<sup>84</sup> Hawaiian Electric asserts that this extension will: (1) “allow [Hawaiian Electric] to gain better insight and clarity to inform updated marginal costs values for establishing export compensation rates in this proceeding based on the latest assumptions vetted and approved in the [IGP] proceeding or other relevant analyses[;]” (2) allow the overall program design of the tariffs to be informed by the updated marginal costs and approval of TOU rates in the ARD Track; (3) provide the Companies the necessary time to build the Smart DER Tariff into the customer billing system and CIT; and (4) help avoid the higher costs associated with the provision of LTE cellular meters to new DER customers prior to the full deployment of mesh meters.<sup>85</sup>

Hawaiian Electric agrees with Commission guidance that, within seven years after the customer’s initial agreement date, all enrolled customers must transition to the Smart DER Tariff, and that Hawaiian Electric shall provide notice to such customers prior to the required transition.<sup>86</sup> To effectuate this transition,

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<sup>84</sup>DER Program Transition Plan at 2. In D&O No. 38196, the Commission ruled that interim exporting programs remain open to new customers until February 1, 2023, or until capacity is reached, whichever comes first. D&O No. 38196 at 48. However, Hawaiian Electric recommends that this sunset date for these interim programs should correspond with the launching of the Smart DER and BYOD Tariffs. DER Program Transition Plan at 2.

<sup>85</sup>DER Program Transition Plan at 2-3.

<sup>86</sup>DER Program Transition Plan at 4.

Hawaiian Electric recommends requiring existing customers with a signed agreement beyond the seven-year period be provided a six-month grace period to complete the transition.<sup>87</sup> Hawaiian Electric further proposes that Smart DER Tariff participants shall be required to transition to advanced meters and TOU rates to comply with the Smart DER Tariff requirements, and that Hawaiian Electric will encourage customers during the six-month grace period to become familiar with TOU and opportunities to modify their usage to align with the TOU rates.<sup>88</sup> Finally, a Smart Export customer transitioning to the Export Rider of the Smart DER Tariff who plans to change the operation of its battery to export during the day will be required to have Hawaiian Electric review the system prior to such transition.<sup>89</sup>

Rather than requiring the non-exporting interim tariffs to remain open to new customers until February 1, 2023, Hawaiian Electric recommends that all interim programs shall close three months after the effective date of the Smart DER Tariff, which it has also recommended to be extended to July 3, 2023.<sup>90</sup> As previously noted, Hawaiian Electric recommends that

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<sup>87</sup>DER Program Transition Plan at 4.

<sup>88</sup>DER Program Transition Plan at 4.

<sup>89</sup>DER Program Transition Plan at 4.

<sup>90</sup>DER Program Transition Plan at 4-5.

Customer Self Supply customers shall transition to the Non-Export rider of the Smart DER Tariff within seven years from the date of their agreement, with a six-month grace period, which would also require an advanced meter and the transition to TOU rates.<sup>91</sup>

Regarding the Commission's guidance that non-exporting interim tariff customers wanting to remain in a DER non-export tariff after the tariff's closure to new customers may transition to the Smart DER Non-Export Rider, Hawaiian Electric reiterates its position that, in the interest of simplification and streamlining offerings, all interim programs should instead be transitioned to the Smart DER Tariff and close within three months of the effective date of the Smart DER Tariff.<sup>92</sup>

Hawaiian Electric concurs that the Feed-In Tariff ("FIT") and Schedule Q should remain unchanged at this time.<sup>93</sup> However, regarding the SIA Tariff, Hawaiian Electric states that it agrees with the DER Parties that SIA customers should not be required to transition to the Smart DER Tariff, but should have the option to enroll in the Smart DER Tariff along with new customers, once it is implemented.<sup>94</sup> Additionally,

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<sup>91</sup>DER Program Transition Plan at 5.

<sup>92</sup>DER Program Transition Plan at 5.

<sup>93</sup>DER Program Transition Plan at 5.

<sup>94</sup>DER Program Transition Plan at 5.

Hawaiian Electric recommends that the SIA Tariff be closed to new customers three months after the implementation of the Smart DER Tariff.<sup>95</sup>

Furthermore, Hawaiian Electric acknowledges and agrees with the Commission's guidance that SDP participants should have the opportunity to transition to a BYOD Tariff after completion of the SDP.<sup>96</sup> The Companies also recommend that SDP customers who transition to the BYOD Tariff "would not receive any upfront incentives associated with BYOD, but only receive monthly incentives corresponding to the BYOD Level in which they enroll."<sup>97</sup>

Finally, Hawaiian Electric explains that, as provided in its DPS Phase 2 Proposal, legacy DR programs should transition to the permanent DER programs after AMI deployment is completed in the third quarter of 2024.<sup>98</sup>

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<sup>95</sup>DER Program Transition Plan at 6.

<sup>96</sup>DER Program Transition Plan at 6.

<sup>97</sup>DER Program Transition Plan at 6.

<sup>98</sup>DER Program Transition Plan at 6.

B.

Functional Integration Plan

Pursuant to Decision and Order No. 38429 in the PBR Docket,<sup>99</sup> Hawaiian Electric submitted its Functional Integration Plan ("FIP") for DERs, which addresses the Commission's request to increase transparency into Hawaiian Electric's plans for utilizing cost-effective grid services from DERs and ensuring that the necessary functionalities and technologies are in place to enable grid service delivery.<sup>100</sup>

The FIP focuses on steps, timelines, milestones, and projected investments/budgets necessary for the BYOD Tariff and Grid Service Purchase Agreement ("GSPA") program utilization.<sup>101</sup> The FIP describes a phased implementation process toward developing industry standard communication protocols and infrastructure to enable DERs to participate in grid service programs.<sup>102</sup> Phase 1 is the OpenADR pathway, which targets load resources and enables system level dispatch to GSPA resources.<sup>103</sup>

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<sup>99</sup>Docket No. 2018-0088, "Decision and Order No. 38429," filed on June 17, 2022 ("D&O No. 38429"), at 61-65.

<sup>100</sup>"Hawaiian Electric's Functional Integration Plan", filed on September 30, 2022 ("Functional Integration Plan").

<sup>101</sup>Functional Integration Plan at 4.

<sup>102</sup>Functional Integration Plan at 5.

<sup>103</sup>Functional Integration Plan at 6.

Phase 2 is the integration of the Institute of Electrical and Electronics Engineer 2030.5 infrastructure ("IEEE 2030.5") into Hawaiian Electric's functionality capabilities, which targets batteries and enables grid service dispatch either through a direction connection to Hawaiian Electric or through a dispatch agent.<sup>104</sup> For Phase 3, Hawaiian Electric plans to focus on implementing a solution for electric vehicle participation in the BYOD Tariff.<sup>105</sup>

For implementation of the BYOD Tariff, Hawaiian Electric discusses how it plans to address the following related items: remote DER dispatch capabilities, customer enrollment, customer device installation, communication technologies, advanced inverter functionalities, cybersecurity, system operations and dispatch manuals, energy management system integration, billing and crediting systems, customer recruitment, evaluation measurement and verification ("EM&V") planning, and the program implementation model.<sup>106</sup>

Hawaiian Electric is developing two paths for communication with customer devices: direct communication through the Companies' DERMS platform that will require an inverter gateway

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<sup>104</sup>Functional Integration Plan at 6-7.

<sup>105</sup>Functional Integration Plan at 7.

<sup>106</sup>Functional Integration Plan at 9-15.

installed on the customer's device, or communication through a dispatch agent to the Companies' DERMS platform that will require internet or cellular connection to the customer's device.<sup>107</sup> Hawaiian Electric plans to upgrade the CIT platform to enhance the customer experience and give more flexibility to perform internal configuration changes, likely before the launch of the new programs, depending on the timeline.<sup>108</sup>

Hawaiian Electric's SAP billing and credit system is required to correctly associate credits and debits from programs to customers, and Hawaiian Electric notes that any new programs require substantial SAP configuration and testing prior to launch.<sup>109</sup> Hawaiian Electric is currently updating the SAP function for the Battery Bonus Program, which will provide direct benefits to the implementation of the BYOD Tariff.<sup>110</sup>

For recruitment to the new programs, Hawaiian Electric describes its three fundamental marketing tactics: marketing materials (such as brochures and "leave behinds"), community outreach meetings, and new or updated websites.<sup>111</sup>

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<sup>107</sup>Functional Integration Plan at 9-10.

<sup>108</sup>Functional Integration Plan at 10.

<sup>109</sup>Functional Integration Plan at 13.

<sup>110</sup>Functional Integration Plan at 13.

<sup>111</sup>Functional Integration Plan at 13.

The Commission previously required Hawaiian Electric to develop an EM&V Plan, which Hawaiian Electric plans to submit in November 2023, following BYOD Tariff implementation.<sup>112</sup>

To implement the various tasks Hawaiian Electric describes in its FIP, Hawaiian Electric provides a detailed chart as Appendix A.<sup>113</sup> As additional context for its proposed schedule, Hawaiian Electric recommends that BYOD Tariff eligibility be limited to Smart DER Tariff customers at program launch, which would make the GSPA program the only grid service option for existing program customers.<sup>114</sup> Hawaiian Electric asserts that this will avoid the need to duplicate all CIT, DERMS, and SAP efforts for all interim DER programs, and that this would simplify market segments and potentially decrease customer and market confusion between the two offerings, the BYOD Tariff and GSPA programs.<sup>115</sup>

Hawaiian Electric proposes to update the FIP by providing an appendix to the two annual reports in Docket No. 2007-0341, the Accomplishments & Surcharges Report ("A&S Report") filed annually in March and the Modification & Evaluation Report ("M&E Report") filed annually in

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<sup>112</sup>Functional Integration Plan at 13.

<sup>113</sup>See Functional Integration Plan at Appendix A.

<sup>114</sup>Functional Integration Plan at 15.

<sup>115</sup>Functional Integration Plan at 15.

November, beginning with the next M&E Report in November 2022 through the last scheduled report within a year after the BYOD Tariff's implementation.<sup>116</sup> Hawaiian Electric assumes this Decision and Order will be issued in October 2022, such that the necessary requirements addressed in its FIP could commence in November 2022, with the first update provided in late November with the M&E Report.<sup>117</sup>

DER Parties' Response: The DER Parties filed comments in response to Hawaiian Electric's FIP, including several distinct comments and a note that the FIP underscores the need for the Commission's Phase 2 Order in the Program Track.<sup>118</sup>

First, the DER Parties assert that the development of the direct participation pathway for the BYOD Tariff should not take precedence over the development of the dispatch agent pathway, recommending that both pathways should be made available to participants as soon as they are available and that the dispatch agent pathway should be the primary means of participation for BYOD Tariff customers.<sup>119</sup> Relatedly, the DER Parties recommend

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<sup>116</sup>Functional Integration Plan at 17-18.

<sup>117</sup>Functional Integration Plan at 4-5.

<sup>118</sup>"Comments of the DER Parties on Hawaiian Electric's Functional Integration Plan" ("DER Parties' Comments on the FIP"), filed on October 11, 2022, at 6.

<sup>119</sup>DER Parties' Comments on the FIP at 1-2.

that dispatch agents should be permitted to participate if they are certified to the California Common Smart Inverter Profile ("CSIP") IEEE 2030.5 infrastructure at either the aggregator or device level, asserting that requiring CSIP certification at the aggregator level would be needlessly restrictive.<sup>120</sup> The DER Parties support development of an Application Programming Interface ("API") Pathway for dispatch agents in lieu of the IEEE 2030.5 pathway, but that Hawaiian Electric's suggested 8 MW threshold for participation in the API Pathway is unwarranted.<sup>121</sup>

Regarding the launch of the Smart DER and BYOD Tariffs, the DER Parties assert that Smart DER Tariff implementation does not need to wait for the updated GNA, and that the BYOD Tariff program participation should not be limited to Smart DER Tariff customers.<sup>122</sup> Finally, the DER Parties assert that the FIP should not have omitted discussion of direct retail billing and crediting for exports during grid event windows.<sup>123</sup>

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<sup>120</sup>DER Parties' Comments on the FIP at 2-3.

<sup>121</sup>DER Parties' Comments on the FIP at 3-4.

<sup>122</sup>DER Parties' Comments on the FIP at 4-5.

<sup>123</sup>DER Parties' Comments on the FIP at 5-6.

IV.

RELEVANT AUTHORITY

HRS § 269-6(a) provides, in relevant part, that “[t]he [P]ublic [U]tilities [C]ommission shall have the general supervision hereinafter set forth over all public utilities, and shall perform the duties and exercise the powers imposed or conferred upon it by this chapter.”

Additionally, HRS § 269-7 states:

**§269-7 Investigative powers.** (a) The [P]ublic [U]tilities [C]ommission and each commissioner shall have power to examine into the condition of each public utility, the manner in which it is operated with reference to the safety or accommodation of the public, the safety, working hours, and wages of its employees, the fares and rates charged by it, the value of its physical property, the issuance by it of stocks and bonds, and the disposition of the proceeds thereof, the amount and disposition of its income, and all its financial transactions, its business relations with other persons, companies, or corporations, its compliance with all applicable state and federal laws and with the provisions of its franchise, charter, and articles of association, if any, its classifications, rules, regulations, practices, and service, and all matters of every nature affecting the relations and transactions between it and the public or persons or corporations.

(b) The [C]ommission may investigate any person acting in the capacity of or engaging in the business of a public utility within the State, without having a certificate of public convenience and necessity or other authority previously obtained under and in compliance with this chapter or the rules promulgated under this chapter.

(c) Any investigation may be made by the [C]ommission on its own motion, and shall be made

when requested by the public utility to be investigated, or by any person upon a sworn written complaint to the [C]ommission, setting forth any prima facie cause of complaint. A majority of the [C]ommission shall constitute a quorum.

HRS § 269-16(b) provides, in relevant part:

(b) No rate, fare, charge, classification, schedule, rule, or practice, other than one established pursuant to an automatic rate adjustment clause previously approved by the [C]ommission, shall be established, abandoned, modified, or departed from by any public utility, except after thirty days' notice to the [C]ommission as prescribed in section 269-12(b), and prior approval by the [C]ommission for any increases in rates, fares, or charges. The [C]ommission, in its discretion and for good cause shown, may allow any rate, fare, charge, classification, schedule, rule, or practice to be established, abandoned, modified, or departed from upon notice less than that provided for in section 269-12(b).

HAR § 16-601-112 provides:

**Short notice filings.** The [C]ommission may, in its discretion and for good cause shown, allow any rate, fare, change, classification, schedule, rule, or practice to be established, abandoned, modified, or departed from upon notice less than that provided for in section 16-601-111.

V.

#### DISCUSSION

The Commission previously identified the objectives for the DER Program Track in D&O No. 37066 as: (1) designing and implementing long-term DER programs; and (2) developing a

transition plan for interim DER programs.<sup>124</sup> To that end, and building on the DER programs and guidance established under DPS Phase 1, for DPS Phase 2 the Commission ordered the Parties to submit a stipulated proposal that addressed the remaining issues.<sup>125</sup> While the Parties were unable to reach agreement on several of those issues and instead each provided their individual proposals,<sup>126</sup> the Commission acknowledges and appreciates the Parties' collective efforts to engage with each other and work towards reaching agreement and understanding on the remaining issues identified in D&O No. 38196.

Nonetheless, a hallmark of the Program Track has been to embrace an iterative approach to decision-making, as the Commission emphasizes the importance of prioritizing the establishment and implementation of long-term DER programs with effective incentives, while also being mindful of the need for their continued evolution and refinement. Despite the lack of full consensus of the Parties on the remaining issues, it is the Commission's inclination to implement the Smart DER and BYOD Tariffs as soon as practicable. The Commission intends that

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<sup>124</sup>D&O No. 37066 at 9-10.

<sup>125</sup>D&O No. 38196 at 63.

<sup>126</sup>D&O No. 38196 at 63 (indicating that each Party should file separate proposals, if the Parties are unable to fully stipulate to the remaining issues, noting areas of agreement and disagreement and any reasons therefor).

this Decision & Order will establish a robust framework for the tariffs that allows for iterative updates to the tariffs based on the best available information at milestones. The Commission also intends to align the new programs with the ARD Track through the AMI meter installation and TOU rate enrollment requirements. As discussed in more detail below, new DER customers may not have access to the new TOU rates until after the Commission approves the final TOU rates, when the TOU study begins in July 2023.<sup>127</sup>

Given the need to align the timelines of the DER Program Track and ARD Track and the issues identified by Hawaiian Electric in its DER PTP that justify extending the implementation of the Smart DER and BYOD Tariffs,<sup>128</sup> the Commission finds that the most practicable approach to program implementation is to extend the effective dates and launch of the Smart DER and BYOD Tariffs to July 3, 2023. This approach: (1) will allow for better alignment with the ARD Track considering the AMI metering and TOU rate enrollment requirements; (2) may reduce costs associated with the rollout of advanced meters as Hawaiian Electric may need to install fewer LTE meters for DER customers; (3) will provide the appropriate time for the Smart DER Tariff export rates and

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<sup>127</sup>See Decision and Order No. 38680, filed on October 31, 2022 (“D&O No. 38680”).

<sup>128</sup>DER Program Transition Plan at 2-3.

BYOD Tariff incentives to be modeled using the more robust methodologies identified in this Decision and Order and using the same time periods as the TOU rates; (4) will provide sufficient time for Hawaiian Electric to develop and refine comprehensive Marketing, Education, and Outreach ("ME&O") materials for the Smart DER and BYOD Tariffs; and (5) will generally reduce customer confusion by aligning the launch of the next-generation rate schedule (i.e., the TOU rates) and the next-generation DER programs (i.e., the Smart DER and BYOD Tariffs).

Therefore, in concert with the approach taken in DPS Phase 1, the Commission will not approve the specific proposal of any Party in its entirety but will adopt a combination of the individual proposals of the Parties, as it deems reasonable and appropriate. Generally, the Commission adopts large portions of the DER Parties' proposed methodology for the Smart DER Tariff Export Rider and BYOD Tariff program structure, but the Commission requires additional modeling before final decision-making on the export rate methodology, as discussed below. The Commission also adopts Hawaiian Electric's proposed timeline for implementation. The specific findings of the Commission are laid out in this Section.

The Commission notes that the evolving landscape of federal tax incentives for DERs may warrant updated modeling to determine export rates and incentives. In particular,

the Inflation Reduction Act of 2022 amended the residential investment tax credit, now renamed the Residential Clean Energy Credit, by extending the credit through 2034 and adding qualified battery storage technology to the list of eligible property.<sup>129</sup> Alongside existing State and utility policies, such amendments should reinforce the incentive to install paired solar and battery storage for residential, commercial, and industrial customers. In addition to policies incentivizing the installation of paired solar and battery storage, the Commission finds that utility programs should encourage DER customers to operate their devices in a way that benefits customers (e.g., through bill reductions), the grid (e.g., by reducing peak load or deferring utility investments), and our environment (e.g., by offsetting or replacing fossil fuel production). These are the core principles influencing the design of the Smart DER and BYOD Tariffs.

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<sup>129</sup>See "Tax Provisions in the Inflation Reduction Act of 2022 (H.R. 5376) Updated August 10, 2022," available at: <https://crsreports.congress.gov/product/pdf/R/R47202> (a Congressional Research Service report prepared for members and committees of Congress regarding the Inflation Reduction Act of 2022, H.R. 5376, 117th Cong. (2022)).

A.

Alignment with the ARD Track

The rollout of next-generation DER programs and next-generation rates (i.e., the TOU rates under development in the ARD Track) should be as synchronous as practicable, given the similar needs and attributes of the programs and rates. The Smart DER Tariff and TOU rate schedules both require the installation of advanced meters, incorporate time-varying rates, will benefit substantially from coordinated ME&O efforts, and aim to align customer behavior with grid needs through appropriate valuation.

Therefore, the Commission finds it appropriate to align several elements of the Smart DER Tariff and BYOD Tariff with the TOU rates to support the successful rollout of both the new DER programs and new TOU rate schedule. For this reason, the Commission finds it appropriate to establish the effective date of the Smart DER Tariff and BYOD Tariff as the same date that the TOU study begins, i.e., July 3, 2023,<sup>130</sup> so that TOU rates are available for DER customers enrolling on either or both of the Smart DER and BYOD Tariffs. This approach will also allow additional modeling to account for the slight change in the time periods for the Export Rider to align the time periods with those

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<sup>130</sup>D&O No. 38680 at 177.

of the TOU rates. The Commission discusses this finding and describes these elements in detail within the sections below, including the schedule for the export compensation rate, the advanced metering and TOU enrollment requirement, the effective dates, and the ME&O efforts.

B.

Smart DER Tariff, Export Rider

In DPS Phase 1, the Commission established the framework of the Smart DER Tariff, including its two riders, the Export Rider and the Non-Export Rider.<sup>131</sup> The Commission found that for the Export Rider, additional investigation and review was necessary to establish the export compensation methodology.<sup>132</sup>

Given that the extension of the procedural schedule enables additional modeling efforts, the Commission is directing Hawaiian Electric to conduct additional modeling to determine export rates in DPS Phase 3, using several methodologies, including the DER Parties' proposed modeling approach along with other methodologies proposed by the Parties. The Commission finds that the comparison of these methodologies will allow the Commission to determine which methodology provides an accurate

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<sup>131</sup>D&O No. 38196 at 36-42.

<sup>132</sup>D&O No. 38196 at 40.

valuation of new DER customer exports to the grid, using the best available inputs, assumptions, and modeling approaches.

1.

Export Compensation Methodology

Initial Export Rates. Hawaiian Electric shall conduct additional modeling using several methodologies to inform the Commission's final decision-making on the initial export rates. The Commission and the Parties shall review and compare the results of these methodologies prior to final decision-making. Therefore, Hawaiian Electric shall model the initial export rates over a seven-year period, using the three following methodologies:

- (1) The DER Parties' methodology described in its Phase 2 Proposal,<sup>133</sup> including modeling three scenarios – the DER Freeze Case, the Base Case, and the Base Case with the high fuel forecast. The average of the avoided cost between the DER Freeze Case and each of the Base Case iterations for each of the export rate periods (i.e., daytime, overnight, and evening peak) would be the export rates for this methodology. The Commission would like to better understand the impact of the high fuel forecast on Hawaiian Electric's anticipated grid needs and the modeled export rates. Therefore, Hawaiian Electric should present these results with and without the scenario modeling the Base Case with the high fuel forecast. Hawaiian Electric should also provide context for how the high fuel forecast has impacted final IGP GNA results (i.e., whether the high fuel forecast ultimately informed the final resource needs assessment/procurement plan).

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<sup>133</sup>DER Parties' Phase 2 Proposal at 5-8.

- (2) A methodology proposed by Hawaiian Electric, using results drawn from ongoing efforts in the IGP process, including GNA results, to the extent possible.
- (3) The Consumer Advocate's methodology described in its Program Track Final Proposal.<sup>134</sup> The Commission notes that this methodology models a time-of-delivery ("TOD") rate for export compensation to reflect the marginal value of energy using EnCompass, a separate modeling software than Hawaiian Electric used in RESOLVE.<sup>135</sup> Hawaiian Electric should determine whether the methodology the Consumer Advocate used within the modeling software can be replicated in RESOLVE/PLEXOS or should be replicated in EnCompass.

Hawaiian Electric shall file by March 1, 2023, a report that includes a detailed description of each methodology in alignment with the above approaches, results of each methodology outlined above, an in-depth discussion of the merits of each methodology, and a proposed framework for implementing future updates to the export rates.<sup>136</sup> The requirements for this report, the DPS Phase 3 Modeling Results, are discussed in detail in Section V.G.2, below. In addition to collaborating with Hawaiian Electric during the modeling phase, the Parties will have

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<sup>134</sup>"Division of Consumer Advocacy's Program Track Final Proposals" ("Consumer Advocate's Phase 1 Proposal"), filed on May 3, 2021, at 29-33 and Attachment 1.

<sup>135</sup>Consumer Advocate's Phase 1 Proposal, Attachment 1, at 2-6.

<sup>136</sup>This in-depth discussion should include, but not be limited to, the five items listed by the DER Parties in their Phase 2 Proposal. DER Parties' Phase 2 Proposal at 7.

a formal opportunity to issue information requests and respond to this report within approximately six weeks after it is filed (see the Third Extension of the Procedural Schedule in Section V.H, below), after which the Commission will determine the long-term export compensation rate methodology and update frequency. As discussed herein, the Commission intends to approve the methodology after the Parties and the Commission review the inputs to and results included in the Companies' report. The Commission also recognizes that this process may allow the Parties to identify improvements to the methodologies outlined above.

Export Rate Time Periods. As discussed above, the Commission finds it appropriate to align the export rate time periods for the Smart DER Tariff Export Rider with the time periods for the TOU rates. To that end, the evening peak period will be four hours, 5 p.m. through 9 p.m., rather than five hours as proposed in the DER Parties' proposal, which the Commission is largely adopting.<sup>137</sup> Table 5 illustrates this schedule for the Smart DER Tariff Export Rider.

**Table 5: Smart DER Tariff Export Rider Time Periods**

	<b>Overnight</b>	<b>Daytime</b>	<b>Evening Peak</b>
<b>Weekdays</b>	9 p.m.-9 a.m.	9 a.m.-5 p.m.	5 p.m.-9 p.m.

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<sup>137</sup>DER Parties' Phase 2 Proposal at 5.

Because Smart DER Tariff customers will be enrolling in both time-varying export rates and usage rates (i.e., the new TOU rates), the Commission finds it important that the time periods for these two sets of rates are identical so that customers can plan the operation of their devices accordingly. If the Export Rider included a five-hour peak period, and the TOU rate schedule included a four-hour peak period, not only could this confuse customers, but the Commission also does not believe reducing the evening peak period by one hour, especially the hour furthest from daytime solar energy production, will significantly impact how customers operate their DER devices. Hawaiian Electric's modeling to develop the initial export rates shall use these updated time periods.

Lock-In Period for New Customers. New customers enrolling in the Smart DER Tariff Export Rider will have their export rates "locked-in" for seven years. After that seven-year period, these customers' export rates will adjust alongside every update to the export rates, as described in detail below. This aligns with Hawaiian Electric's Phase 1 Final Proposal, which recommended that first-time customers should have their export rates locked in for seven years to provide certainty on their investment.<sup>138</sup> The Commission finds that a seven-year period

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<sup>138</sup>Hawaiian Electric's Phase 1 Final Proposal at 23.

balances the need for customer certainty in the value of their investment with the need for having accurate, updated rates. The seven-year lock-in period should allow customers a reasonable payback period prior to any updates to their export rates that may affect the economic operation of their devices. Further, the seven-year lock-in period aligns with the seven-year transition requirement for interim exporting DER tariff customers, as each set of customers will first update their export rates seven years after their initial enrollment. Both sets of customers will effectively have the same opportunity to recover their investment over a period with certain export rates.

Excess Export Compensation Credits. For customers on the Smart DER Tariff, the Commission finds Hawaiian Electric's proposal generally appropriate, excluding the proposed discount rate and limit to excess grid service export credits that a customer may cash out at the end of each year.<sup>139</sup> Therefore, export credits for these customers will be classified as either grid service export credits or non-grid service export credits, where grid service export credits include exports occurring during events for customers enrolled in programs in which Hawaiian Electric calls the events, and non-grid service exports

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<sup>139</sup>Hawaiian Electric's Phase 2 Proposal at 4.

include all other exports.<sup>140</sup> Excess non-grid service export credits may roll forward on a monthly basis and shall be forfeited every 12 months. Excess grid service export credits may roll forward without expiration, and customers may “cash out” these credits for the export rate during the period in which the credit was generated (i.e., daytime export rate, evening peak export rate, or overnight export rate).

This approach will offer additional avenues for customers to receive compensation for the value their exports provided to the grid, while also encouraging customers to enroll in grid service programs. Limiting the cashing out of excess export credits to grid service exports addresses some customer equity concerns raised by the Consumer Advocate. Considering all ratepayers would bear the costs, cashing out should be limited to the important export periods during grid service events in which DERs are providing overall system value. The Commission finds that Hawaiian Electric’s proposal to use a discount rate of 50% and apply a cap equal to 50% of the customers’ excess grid service export credits would unnecessarily limit the amount that a customer

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<sup>140</sup>The Commission notes that, as of the filing of this Decision and Order, these programs include the GSPAs and BYOD Levels 2 and 3, but more programs may become available to which this framework will apply.

can cash out, especially since the amount is already limited to exports associated with utility grid service programs.

The Commission recognizes that there may be an additional opportunity to improve customer equity by allowing DER customers to donate excess credits to low-income customers, or to those customers who cannot access DERs. The Commission directs Hawaiian Electric to develop a proposal for such a DER credit donation program in conjunction with the Parties for consideration by the Commission. Hawaiian Electric shall provide an update on this development in the Supplement to the Program Transition Plan, described below. The Commission notes that the Legislature has requested the Commission consider efforts to mitigate high energy burdens for low- and moderate-income customers and investigate how to integrate considerations of energy equity and justice across its work, including through the establishment of a proceeding or proceedings.<sup>141</sup> The Commission intends to establish such a

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<sup>141</sup>See Senate Concurrent Resolution No. 48, Senate Draft 1, Session Laws Hawaii of 2022, adopted on April 19, 2022, available at [https://www.capitol.hawaii.gov/session2022/bills/SC\\_R48\\_SD1\\_PDF](https://www.capitol.hawaii.gov/session2022/bills/SC_R48_SD1_PDF); see also Senate Resolution No. 43, Senate Draft 1, Session Laws of Hawaii 2022, adopted on April 6, 2022, available at: [https://www.capitol.hawaii.gov/session2022/bills/S\\_R43\\_SD1\\_pdf](https://www.capitol.hawaii.gov/session2022/bills/S_R43_SD1_pdf); and House Resolution No. 43, House Draft 1, Session Laws of Hawaii 2022, adopted on April 4, 2022, available at: [https://www.capitol.hawaii.gov/session2022/bills/H\\_R43\\_HD1\\_pdf](https://www.capitol.hawaii.gov/session2022/bills/H_R43_HD1_pdf). These resolutions explicitly reference the regulatory initiatives currently underway in this docket, which may address rate design for all customers and specifically

proceeding as requested by the Legislature, and to the extent possible, Hawaiian Electric shall collaborate with the Parties in that proceeding to develop the proposal for this DER credit donation program.

Update Framework. The Commission finds it necessary to establish a framework for regular updates to the export compensation rate, given the evolving nature of the value provided by customer-sited DERs and of temporally-driven grid needs. The planned addition of more renewables and storage to the grids will change the relative value of exports within each of the three periods. When customers enroll in the Smart DER Tariff Export Rider, it is important that the export rates that they will receive represent a just and reasonable valuation of grid services provided. Thus, Hawaiian Electric will update the export rates for the Smart DER Tariff Export Rider regularly using the best available data so that customers' export rates reasonably reflect their value. Hawaiian Electric shall propose the update framework, including the frequency and necessary filings, in its filing of the DPS Phase 3 Modeling Results, and the Commission shall determine the update framework in DPS Phase 3.

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provide for proposed approaches to address consideration of relief for low- and moderate-income customers.

While the development of the initial export rates may make use of results from the IGP process due to data availability, the Commission does not find it appropriate to tie the update frequency to the IGP process at this time and would like input from Hawaiian Electric and the Parties on what a reasonable cadence for updates might be. This is because the regularity of each IGP cycle following the first IGP cycle is currently uncertain, and there are other factors that may influence the availability of data and the need to update export rates, such as the evolution of TOU rates described in D&O No. 38680.

C.

BYOD Tariff

In DPS Phase 1, the Commission adopted the foundation of the BYOD Tariff, outlining Level 1 as a flexible user dispatch program, Level 2 as a utility dispatch program, and Level 3 as a system grid services program.<sup>142</sup> The Commission found that further collaboration in DPS Phase 2 was necessary for the development of the appropriate incentive structure and resolution of other outstanding issues related to the BYOD Tariff.<sup>143</sup>

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<sup>142</sup>D&O No. 38196 at 42-47.

<sup>143</sup>D&O No. 38196 at 45 and 47.

After review of the Parties' positions, the Commission finds it appropriate to establish the BYOD Tariff using the DER Parties' general approach laid out in their Phase 2 Proposal, subject to certain modifications. Modifications to the DER Parties' approach are outlined in the below sections. The Commission notes that additional modeling shall determine the appropriate rates and incentives for use in the initial BYOD Tariff and its riders, and that this established framework for the BYOD Tariff will allow iteration and continuous improvement for the robust DER market in the State. As stated by the DER Parties, the BYOD Tariff should create a "framework and vehicle for channeling DERs to maximize system value and fully integrate them as a part of the customer-centric grid of the future[.]"<sup>144</sup> Establishing the BYOD Tariff as soon as practicable in July 2023 is appropriate to encourage the integration of DERs into the "customer-centric grid of the future."

1.

General

Tariff Capacity. Hawaiian Electric shall establish the tariff capacity for the BYOD Tariff at 70 megawatts ("MW") for HECO, 17 MW for HELCO, and 19.9 MW for MECO (split by island at

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<sup>144</sup>DER Parties' Phase 2 Proposal at 12.

17 MW for Maui, 1.45 MW for Lanai, and 1.45 MW for Molokai). Hawaiian Electric and the DER Parties propose the same aggregate tariff capacity, except Hawaiian Electric proposes individual capacities for each of the three levels of the tariff, while the DER Parties propose to aggregate the capacity for the entire tariff.<sup>145</sup> The Commission finds that the DER Parties offer a more flexible approach, should more customers be drawn to any of the three levels, so the tariff capacity will be in aggregate. Hawaiian Electric shall notify the Commission when 50%, 75%, and 90% of the BYOD Tariff capacity has been reached for each island, at which point updates to the tariff capacity may be considered. SDP customers transitioning to any level of the BYOD Tariff shall be excluded from this capacity total.

Eligible Customers. In D&O No. 38196, the Commission found that for the BYOD Tariff, “[e]ligible devices shall include load shaping devices that can provide the grid services identified by Hawaiian Electric in the respective Rider[,]” and that “[c]ustomers may enroll their device in a BYOD Rider regardless of their underlying tariff and will be compensated according to their Rider enrollment.”<sup>146</sup> Aligned with this principle as well as the

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<sup>145</sup>Hawaiian Electric’s Phase 2 Proposal at 5; DER Parties’ Phase 2 Proposal at 14.

<sup>146</sup>D&O No. 38196 at 44.

desire to provide customers with choices in their DER program options, and the longstanding objective of the Program Track to transition interim DER programs to long-term programs, the Commission does not accept Hawaiian Electric's recommendation to only allow Smart DER Tariff customers to participate in the BYOD Tariff.<sup>147</sup> Rather, the Commission agrees with the DER Parties that restricting BYOD Tariff participation to Smart DER Tariff customers would reduce customer choice and reduce the eligible pool of customers for the BYOD Tariff.<sup>148</sup>

While the BYOD Tariff may initially target customers with batteries and customers on the new Smart DER Tariff, as these customers are more likely to be able to provide the required grid services, the Commission does not believe that eligibility should be restricted by tariff or device, provided that the customer meets all other enrollment requirements. Further, while the Commission is not currently directing any particular action regarding legacy DR or new DER participation in the BYOD Tariff, the Commission expects that Hawaiian Electric and the Parties will pursue pathways for additional resources to enroll on one of or all of the BYOD Tariff's Riders, such as for legacy demand response resources

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<sup>147</sup>Functional Integration Plan at 15.

<sup>148</sup>DER Parties' Comments on the FIP at 5.

and electric vehicles, resources for which Hawaiian Electric indicated it is pursuing eligibility in its FIP.<sup>149</sup>

Customer Commitment. Customers will be required to commit to enrollment in the BYOD Tariff for ten years. The Commission finds this customer commitment appropriate given the Upfront Incentives that will be offered at each of the three levels of the BYOD Tariff. This commitment aligns with the commitment for SDP customers, as the BYOD Tariff is a long-term grid services program that is similar in design to the emergency grid services program (i.e., SDP).

Customer Transition. As ordered in D&O No. 38196, customers may transition from one level to another once per year.<sup>150</sup> Customers transitioning to a level with a higher Upfront Incentive will not be eligible for additional Upfront Incentives, and customers transitioning to a level with a lower Upfront Incentive must return a prorated portion of their Upfront Incentive based on the amount of time the customer participated in the originating program.

Crediting for Controlled Energy Exports. Hawaiian Electric shall continue to compensate customer energy exports during grid service events across the three levels of the

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<sup>149</sup>Functional Integration Plan at 5-7.

<sup>150</sup>D&O No. 38196 at 45.

BYOD Tariff at the customer's underlying DER tariff export rate (e.g., Smart DER Tariff Export Rider, Net Energy Metering, or one of the interim exporting tariffs). The Commission notes that the DER Parties propose to create a "1:1 retail credit," which would credit customers the difference between their underlying DER tariff export rate and the retail rate, so that customers are "indifferent as to whether their self-generated energy is exported to the grid or self-consumed."<sup>151</sup> As a preliminary note, the Commission agrees that it is important, especially in the development of new DER programs, to incentivize customers to reduce peak load through the operation of their DERs, whether customers achieve that reduction through export or self-consumption. However, this mechanism has not been sufficiently explored by the Parties and in the record for the Commission to adopt 1:1 retail crediting, especially since the Parties disagree on whether this mechanism would incur additional costs to ratepayers.<sup>152</sup> In addition, it is not clear whether it would be reasonable, given the value of exported energy during the peak period or at

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<sup>151</sup>DER Parties' Phase 2 Proposal at 22-24.

<sup>152</sup>Compare DER Parties' Phase 2 Proposal at 24, with Hawaiian Electric's Phase 2 Proposal at 6. While the DER Parties contend this is an accounting mechanism that would not incur additional costs to ratepayers, Hawaiian Electric contends that this structure would result in a premium being paid to these customers for a long-term grid services program that is not put in place to address emergency conditions.

Hawaiian Electric's dispatch for urgent grid needs, to compensate customers for energy exports at a rate higher than the "retail" rate. Further, the impact of this mechanism in relation to time-varying consumption rates has not been provided in the record. The Commission acknowledges that resolution of this issue is a priority given that SDP customers, who receive a proxy retail credit for the first three years of their SDP participation,<sup>153</sup> may transition to the BYOD Tariff following the initial SDP emergency period for the remainder of their ten-year commitment. Considering the benefits of resolving this issue prior to launch of the BYOD Tariff, the Parties shall further explore this mechanism and reach an agreed proposal for Commission consideration, which Hawaiian Electric shall file in the DPS Phase 3 Modeling Results, described below in Section V.G.2. In the proposal, the Parties should provide reasoning, and where possible, quantitative evidence, that discusses the impacts of the agreed upon mechanism on incentives for customers to install DERs

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<sup>153</sup>"Hawaiian Electric Companies' Revisions to EDRP/SDP Tariff Sheets," filed on March 1, 2022, Exhibit 1 at Revised Sheet No. 49.30-D. The Fixed Monthly Export Credit ("FMEC") is the proxy retail credit applied to non-NEM customers for their first three years of Battery Bonus Program participation, which is calculated using the following formula: "[FMEC] = (the sum of the Non-Fuel Energy Charges and all per-kWh charges, adjustments, and surcharges applicable to the customer's rate schedule using February 2022 rates, adjustments, and surcharges (\$/kWh) - non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours X 30 days." Id.

and to reduce peak demand (or otherwise favorably modify load), the impact of the proposal on non-participating customers, whether the mechanism incentivizes self-consumption or energy exports and why, the impacts of time-varying consumption rates, and any other relevant factors for Commission consideration.

Annual Performance Measurement Using AMI Data.

The Commission adopts Hawaiian Electric's proposal to assess performance by auditing participating customers using AMI meter data.<sup>154</sup> This approach avoids the need to develop a complicated true-up mechanism that may incur excessive costs, and is convenient given that BYOD Tariff customers will have AMI meters installed either prior to or upon enrollment. Hawaiian Electric shall report on the performance measurement of BYOD Tariff customers annually in the Annual A&S Report in Docket No. 2007-0341, beginning with 2023 data in the 2024 A&S Report. This data should be utilized during the regular updates to the BYOD Tariff's incentive structure, outlined below. The Commission notes that Hawaiian Electric plans to file its EM&V Plan, pursuant to D&O No. 38429 and described in its FIP, in the November 2023 M&E Report.<sup>155</sup> This annual performance measurement shall be incorporated into the EM&V Plan as Hawaiian Electric sees

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<sup>154</sup>Hawaiian Electric's Phase 2 Proposal at 7.

<sup>155</sup>Functional Integration Plan at 17.

fit, and Hawaiian Electric may determine whether a separate report from planned reports within the EM&V Plan is necessary.

2.

Level 1, Scheduled Dispatch

Customers enrolling in Level 1 shall provide a scheduled Capacity Load Reduction grid service. Customers will commit to dispatching their Committed Capacity (in kilowatts ("kW")), which represents the portion of the customer device's capacity that will be available for use in the BYOD Tariff for the level's dispatch time, for 365 days per year for a two-hour time period selected by the customer from several options provided by Hawaiian Electric during the evening peak period. Customers shall commit to operating their DER devices in this manner for ten years. Customers will receive an Upfront Incentive upon enrollment and a Monthly Incentive during each month of their enrollment, both tied to the customer's Committed Capacity. Hawaiian Electric shall conduct additional modeling to determine and present proposed incentives in the DPS Phase 3 Modeling Results. The requirements for communication, operation, and performance verification will be the same as those for SDP, unless otherwise ordered by the Commission.

3.

Level 2, Utility Dispatch

Customers enrolling in Level 2 shall provide a Capacity Load Reduction grid service, scheduled by Hawaiian Electric. Customers will respond to Hawaiian Electric's emergency remote dispatch by dispatching their Committed Capacity (in kW) for one to two hours, typically though not necessarily during the evening peak period, with 24-hour day-ahead notice from Hawaiian Electric. Either an internet or cellular data connection will be required for customer devices so that the devices will respond upon dispatch, as well as the communications protocols and Smart Inverter functions described by the DER Parties in their proposal.<sup>156</sup>

Customers shall commit to participating in up to 156 events per year for a ten-year period, with the option to opt out of up to three events per year without incurring penalties or jeopardizing the ability to earn incentive payments.<sup>157</sup> Customers will receive an Upfront Incentive upon enrollment and a Monthly Incentive during each month of their enrollment, both tied to the customer's Committed Capacity. Hawaiian Electric shall conduct additional modeling to assess the value of this service,

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<sup>156</sup>DER Parties' Phase 2 Proposal at 14, 18-19, and 28-29.

<sup>157</sup>DER Parties' Phase 2 Proposal at 17.

and present their proposed incentives in the DPS Phase 3 Modeling Results.

Hawaiian Electric shall prepare to have all communication processes to enable this emergency remote dispatch developed, tested, and available for use by the go-live date of this program in July 2023.

4.

Level 3, System Grid Services

Customers enrolling in Level 3 shall sign up for the level in general, which will include the provision of several grid services. Upon the opening of BYOD Level 3 in July 2023, two grid services will be available: Capacity Load Reduction and Capacity Load Build. Additional grid services may be added to Level 3 during future BYOD Tariff updates, but customers are only required to enroll in those grid services available on their date of enrollment. For Capacity Load Reduction, customers will respond to Hawaiian Electric's signal to dispatch their Committed Capacity (in kW) for two to four hours, typically though not necessarily during the evening peak period, with 24-hour day-ahead notice from Hawaiian Electric. For Capacity Load Build, customers will respond to Hawaiian Electric's signal to charge their DER device at their Committed Capacity (in kW) for two to four hours, typically though not necessarily during the daytime period, with 24-hour day-ahead

notice from Hawaiian Electric. Similar to BYOD Level 2, either an internet or cellular data connection shall be required for customer devices so that the devices can respond upon dispatch, and the communications protocols and Smart Inverter functions outlined by the DER Parties will apply.<sup>158</sup>

Customers shall commit to participating in up to 365 combined events per year for all grid services over the ten-year commitment, which should allow Hawaiian Electric more flexibility in determining when grid service events of any kind are appropriate. Customers will receive an Upfront Incentive upon enrollment and a Monthly Incentive during each month of their enrollment, both tied to the customer's Committed Capacity. Hawaiian Electric shall conduct additional modeling to determine and present proposed incentives in the DPS Phase 3 Modeling Results.

Hawaiian Electric shall prepare to have all communication processes to enable this emergency remote dispatch developed, tested, and available for use by the go-live date of this program in July 2023.

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<sup>158</sup>DER Parties' Phase 2 Proposal at 14, 22, and 28-29.

Modeling for Initial Incentives

Hawaiian Electric shall build on the methodology described by the DER parties in their Phase 2 Proposal for this update. Hawaiian Electric shall use the appropriate available modeling tools to estimate the value of providing the same or similar services (as each of the grid services in the BYOD Tariff) through new build utility resources, to determine the system operating efficiencies gained through integrating customer-sited resources, and to determine any other additional value provided by each level within the BYOD Tariff.<sup>159</sup> This modeling may be drawn from ongoing efforts in and results from the IGP process, to the extent possible.

Hawaiian Electric shall file by March 1, 2023, a report that includes a detailed description of its methodology in alignment with the above approach, results of the analysis outlined above, an in-depth discussion of the merits of this methodology, and a proposed framework for implementing future updates to the BYOD Tariff incentives, as discussed in the following section. This report ("The DPS Phase 3 Modeling Results") is discussed in Section V.G.2. In addition to collaborating with Hawaiian Electric during the modeling phase, the Parties will have an opportunity to

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<sup>159</sup>DER Parties' Phase 2 Proposal at 25-26.

issue information requests and comments on this report within approximately six weeks after it is filed (see Section V.H, below), after which the Commission will decide on the long-term incentive methodology and update framework. The Commission recognizes that the Parties may identify improvements to this methodology and additional details that need to be worked out, so this process will incorporate sufficient time for review and approval by the Commission prior to the effective date of the BYOD Tariff.

6.

BYOD Fast Frequency Response ("FFR")

The Commission does not believe the DER Parties' BYOD FFR proposal is ripe for implementation. Unlike the three levels of the BYOD Tariff, separation of the BYOD FFR service has not been vetted by the Parties in the DER Program Track, and the Commission observes that further consideration of the ability of DERs to provide both capacity and FFR services is necessary given the obligation of DERs enrolled in the BYOD Tariffs to respond when called on or scheduled to provide capacity. Conceptually, this grid service could also be incorporated as one of several additional grid services within Level 3. Should the Parties agree that adding FFR as a grid service available for enrollment in the BYOD Tariff is appropriate, it can be addressed in one of the future updates to the BYOD Tariff.

7.

Update Framework

Together with the Smart DER Tariff Export Rider's Update Framework, the Commission finds it necessary to establish a framework for regular updates to the incentive structure of the three levels of the BYOD Tariff. As the grid evolves, grid needs that may be provided by customer-sited DERs may change, as may the value of these grid services. It is important that a customer receives a reasonably accurate valuation of grid services upon enrollment in the BYOD Tariff. Thus, Hawaiian Electric shall update the incentive structure, including both the Upfront Incentive and Monthly Incentive, regularly using the best available data so that customers' incentives reasonably reflect the value of their grid service contributions. Additionally, this Update Framework will allow for the introduction of new grid services in BYOD Level 3 or modification of existing grid services in BYOD Level 3. Hawaiian Electric shall propose the update framework, including the frequency and necessary filings, in its filing of the DPS Phase 3 Modeling Results. This Update Framework shall occur simultaneously with the Update Framework for the Smart DER Tariff, described above.

The Commission notes that in D&O No. 38680, the Commission directed Hawaiian Electric to conduct a

Marginal Cost of Service Study ("MCOSS") along with the Parties.<sup>160</sup> The results of this MCOSS may also inform updates to the BYOD Tariff incentive structure, to the extent applicable. While the development of initial incentives is tied to the IGP process due to data availability, the Commission does not find it appropriate to tie the update frequency to the IGP process at this time, and would like input from Hawaiian Electric and the Parties on what a reasonable cadence for updates might be. This is because the regularity of each IGP cycle following the first IGP cycle is uncertain, and there are other factors that may influence the availability of data and the need to update the incentive structure, such as the success of the various grid service programs (i.e., SDP, GSPAs, and BYOD).

8.

Updates to the Functional Integration Plan

The Commission notes that Hawaiian Electric plans to update its FIP several times throughout the implementation of the BYOD Tariff, including providing an update as an attachment to its November 2022 M&E Report in response to this Decision and Order.<sup>161</sup> The DER Parties provided several comments in response to

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<sup>160</sup>D&O No. 38680 at 156-157 and 177.

<sup>161</sup>Functional Integration Plan at 5.

Hawaiian Electric's FIP,<sup>162</sup> which Hawaiian Electric may address in its next update to the FIP. As described above, however, the Commission directs Hawaiian Electric, in collaboration with the Parties, to develop a proposal for addressing the value of energy exported under the BYOD Tariff and file that proposal in the DPS Phase 3 Modeling Results. Considering that Hawaiian Electric will file the next update to the FIP prior to the DPS Phase 3 Modeling Results, Hawaiian Electric may provide an update on the development of this proposal, which relates to the DER Parties' Comment #6, in its next update to the FIP.<sup>163</sup>

D.

Clarifications on Advanced Meter and TOU Enrollment Requirements

For both the Smart DER Tariff and BYOD Tariff, the Commission found in DPS Phase 1 that customers enrolling on these tariffs must have an advanced meter installed (at the utility's expense if the customer does not already have an advanced meter installed) and enroll in a TOU tariff offering.<sup>164</sup> The Commission further explained that, "[t]he manner in which customers will receive an advanced meter, enroll in the

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<sup>162</sup>DER Parties' Comments on the FIP.

<sup>163</sup>See DER Parties' Comments on the FIP at 5.

<sup>164</sup>D&O NO. 38196 at 59-60.

Smart DER [and BYOD] Tariff[s], and also enroll in TOU will be addressed in DPS Phase 2.”<sup>165</sup>

In response to whether the planned rollout of AMI would impact the advanced meter and TOU enrollment requirements for the Smart DER and BYOD Tariffs, the Parties proposed amendments to the rollout of these tariffs and their requirements. Hawaiian Electric proposed to align the start date of the Smart DER Tariff with the start date of the BYOD Tariff in July 2023 to allow a longer time period for deployment of the AMI meters.<sup>166</sup> The DER Parties proposed to remove or suspend the TOU enrollment requirement until all customers have AMI and the ability to enroll in TOU rates established in the ARD Track.<sup>167</sup> The Consumer Advocate supports the TOU enrollment requirement, since the higher evening peak rates will “provide DER participants with the incentive to reduce load during the higher cost, on-peak time periods.”<sup>168</sup>

Given the Commission’s finding that the Smart DER Tariff and BYOD Tariff shall open for enrollment in July 2023,

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<sup>165</sup>D&O No. 38196 at 38 and 45.

<sup>166</sup>Hawaiian Electric’s Phase 2 Proposal at 9; see Consumer Advocate’s Phase 2 Proposal at 17 (the Consumer Advocate noting that it “does not object to the Companies’ proposal associated with the timing of AMI deployment, roll-out of the new DER programs, and sunseting of the existing programs.” Id. at 17.).

<sup>167</sup>DER Parties’ Phase 2 Proposal at 30.

<sup>168</sup>Consumer Advocate’s Phase 2 Proposal at 13.

as discussed above, the Commission finds Hawaiian Electric's proposal appropriate. Additionally, the Commission's finding in DPS Phase 1 that Smart DER Tariff and BYOD Tariff customers shall receive an advanced meter and enroll in TOU rates remains unchanged.<sup>169</sup> Requiring enrollment in TOU rates provides a strong signal to DER customers to reduce usage or self-supply during the peak period, and to export excess energy. For customers who do not already have an advanced meter upon enrollment in either tariff, Hawaiian Electric shall install an advanced meter at the customer's property, at the utility's expense if necessary. The Commission notes that Hawaiian Electric confirmed its understanding that Smart DER Tariff and BYOD Tariff customers will receive advanced meters immediately upon enrollment in these programs, in response to an information request in Docket No. 2018-0141.<sup>170</sup>

Customers enrolling in the Smart DER Tariff and BYOD Tariffs shall also enroll in the new TOU rates established through the ARD Track in D&O No. 38680 in this proceeding

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<sup>169</sup>D&O No. 38196 at 59-60.

<sup>170</sup>Docket No. 2018-0141, Letter From: K. Katsura To: Commission Re: Docket No. 2018-0141 - Hawaiian Electric Companies For Approval to Commit Funds in Excess of \$2,500,000 for the Phase 1 Grid Modernization Project and Related Requests; Hawaiian Electric Responses to Commission's Information Requests ("HECO Response to PUC-HECO-IR-\_\_\_"), filed on July 22, 2022, at HECO Response to PUC-HECO-IR-124(a).

immediately upon Tariff enrollment.<sup>171</sup> The Commission clarifies that customers shall be allowed to opt out onto the non-TOU rate established in D&O No. 38680.<sup>172</sup> As discussed in D&O No. 38680, the Commission's inclination is to require that all customers, including both DER and non-DER customers, enroll on the TOU rates as the default option in the long-term with the option to opt-out onto a cost-reflective non-TOU rate.<sup>173</sup> Thus, the Smart DER Tariff and BYOD Tariff customers are not being held to a unique standard with this TOU enrollment requirement, especially with the option to opt-out onto a cost-reflective non-TOU rate, rather these customers shall be early adopters of the TOU rate.

The Commission observes that as of the filing of this Decision and Order, the new TOU rates have not yet been made available through the processes established in the ARD Track. While the exact date that the new TOU rates will be established and available for DER customer enrollment is uncertain, the new TOU rates will certainly be available at the commencement of the TOU study on July 3, 2023.<sup>174</sup> Having DER customers transition onto new time-varying export rates and new time-varying usage rates

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<sup>171</sup>D&O No. 38680.

<sup>172</sup>D&O No. 38680 at 157.

<sup>173</sup>D&O No. 38680 at 158-159.

<sup>174</sup>D&O No. 38680 at 176.

simultaneously will be more seamless and cause less confusion than having the transitions occur separately. Moving the effective dates of the new tariffs to July 2023 allows this seamless transition for all DER customers enrolling on the new tariffs. Hawaiian Electric should discuss the necessary steps to enable the advanced metering and TOU enrollment requirements, given the development of TOU rates in the ARD Track, in its Supplement to the Program Transition Plan ("PTP Supplement"). Hawaiian Electric should carefully and clearly communicate requirements and options with customers to ensure understanding and a positive customer experience when enrolling in new programs and rates. A comprehensive list of items for inclusion in the PTP Supplement is described further below.

E.

Transition Plans

1.

Closure of the SIA Tariff

In D&O No. 38196, the Commission did not alter the SIA Tariff, the FIT, or Schedule Q, noting that the Commission may address if and how these programs may close and/or transition in DPS Phase 2.<sup>175</sup> To assist in this decision, the Commission asked

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<sup>175</sup>D&O No. 38196 at 49.

the Parties to address in their Phase 2 Proposals whether the SIA Tariff should remain open to new customers, and, if not, whether existing SIA customers should be required to transition to the Smart DER Tariff Non-Export Rider.<sup>176</sup> Hawaiian Electric proposes that existing SIA customers be allowed to remain SIA customers, that existing SIA customers could transition to the Smart DER Tariff (but would not be required to transition), and that the SIA Tariff would close three months after the Smart DER Tariff becomes effective.<sup>177</sup> The Consumer Advocate notes that the new Smart DER Tariff will allow for the installation of larger size distribution systems; therefore, closing the SIA Tariff will allow for better consistency and review.<sup>178</sup> The DER Parties propose that the SIA Tariff remain open for new customers so that the Parties can determine whether the SIA Tariff should remain open on a permanent basis. This decision would be informed by customer preferences, after the market has time to adjust to both SIA Tariff and Smart DER Tariff Non-Export Rider availability.<sup>179</sup>

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<sup>176</sup>D&O No. 38196 at 52.

<sup>177</sup>DER Program Transition Plan at 5-6.

<sup>178</sup>Consumer Advocate's Phase 2 Proposal at 17-18. The Consumer Advocate also proposes to evaluate the SIA Tariff as part of the microgrid proceeding, but the Commission does not find this appropriate. Id. at 18.

<sup>179</sup>DER Parties' Phase 2 Proposal at 32-33.

The Commission agrees with Hawaiian Electric's proposal, and finds that Hawaiian Electric shall close the SIA Tariff to new customers three months after the Smart DER Tariff becomes effective. As discussed below, the Commission expects the closure of the SIA Tariff by October 3, 2023. Existing customers enrolled on the SIA Tariff, and those in the queue prior to its closure, will not be affected, though these customers will have the option to transition to either of the riders on the Smart DER Tariff, though such transition is not a requirement. As the Parties and the Commission have developed the Smart DER Tariff as the long-term DER tariff offering, the Commission does not find it necessary to continue the SIA Tariff offering once the Smart DER Tariff Non-Export Rider is available. The Smart DER Tariff is designed for customers to operate their devices to support the grid as much as possible, and new customers should be encouraged to enroll in the new, long-term DER tariff. Further, the Non-Export Rider's design allows larger, self-supply customers to enroll, which the Commission understands is one of the primary reasons customers enroll in the SIA Tariff.

2.

Clarification on Interim Tariff Closure and Customer Transition

The Commission laid out parameters for the closure of interim tariffs and required customer transition in D&O

No. 38196.<sup>180</sup> Generally, all interim tariffs - including exporting and non-exporting interim tariffs - shall close to new customers, and all customers on exporting interim tariffs shall transition to the Smart DER Tariff Export Rider no later than seven years after the customer's initial agreement date (with a six-month grace period), while customers on non-exporting interim tariffs will not be required to transition. Hawaiian Electric proposes in its PTP that all interim tariffs close three months after the effective date of the Smart DER Tariff and that the Commission apply the requirement to transition to non-exporting interim tariff customers as well.<sup>181</sup> The Commission does not anticipate that moving non-exporting customers to a new tariff would result in benefits that would justify the added administrative burden or customer confusion. Further, as described in D&O No. 38680, all customers will eventually be moved to the new TOU rates as default rates (with the option to opt-out), including those customers on non-exporting interim tariffs.<sup>182</sup>

The Commission agrees with Hawaiian Electric's proposal to close all interim tariffs three months after the effective date of the Smart DER Tariff. This approach will allow some overlap in

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<sup>180</sup>D&O No. 38196 at 48-49.

<sup>181</sup>DER Program Transition Plan at 2-4.

<sup>182</sup>See D&O No. 38680 at 129, 145 and 157-159.

open enrollment periods between the new tariffs and the interim tariffs, which will allow Hawaiian Electric and the market to adjust to the availability of the new tariffs prior to closure of the interim tariffs. The Commission notes that its finding in D&O No. 38196 that interim tariffs shall remain open to new customers until February 1, 2023, was made prior to knowledge of the effective date of the Smart DER Tariff.<sup>183</sup> Considering that the effective date of the Smart DER Tariff will be July 3, 2023, as discussed below, and that the Commission finds it appropriate to close interim tariffs three months after this effective date, the Commission clarifies that exporting and non-exporting interim tariffs shall remain open until October 3, 2023, or until capacity is reached, whichever is earlier.

### 3.

#### Transition of SDP Customers to the BYOD Tariff

In D&O No. 38196, the Commission found that SDP customers who choose to transition to the BYOD Tariff, following the completion of their initial phase of SDP on December 31, 2023, would only be eligible for a portion of incentives for each of the three levels, which would be further addressed in DPS Phase 2.<sup>184</sup>

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<sup>183</sup>D&O No. 38196 at 48.

<sup>184</sup>D&O No. 38196 at 49.

Because the initial incentives for the BYOD Tariff are derived from the SDP incentives with both an upfront and monthly incentive, the Commission finds that transitioning SDP customers should not be eligible for any additional Upfront Incentives. For the monthly incentives, the monthly BYOD Tariff incentive may replace the Monthly Peak Capacity Payment afforded SDP participants, and the Fixed Monthly Export Credit afforded SDP participants may continue to apply for the remainder of the SDP participant's three-year allowance.<sup>185</sup> Further, SDP customers may serve the remainder of their ten-year commitment on the BYOD Tariff, though the Commission notes that SDP customers are not required to transition to the BYOD Tariff and may remain on SDP for the duration of their commitment, at their decision.

#### 4.

##### Additional Development of Legacy DR Program Transition

In D&O No. 38196, the Commission noted that the transition plan for legacy DR programs would be addressed in DPS Phase 2.<sup>186</sup> In their Phase 2 Proposals, the Parties support

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<sup>185</sup>The Commission notes that the application of the Fixed Monthly Export Credit may change, depending on the Parties' proposal for addressing the retail crediting mechanism in the BYOD Tariff, outlined in Section V.C.1.

<sup>186</sup>D&O NO. 38196 at 49.

transitioning legacy DR programs to the long-term DER programs, should such a transition prove cost-effective. The Parties also note that several technical issues, including the compensation structure, value, and operational characteristics of legacy DR resources, need to be developed further prior to the initiation of this transition.<sup>187</sup> With these considerations in mind, and the indication from Hawaiian Electric that these legacy DR programs are a valuable load management resource in 2022 and 2023 with the retirement of the AES coal plant,<sup>188</sup> the Commission does not find it appropriate to direct any requirement to transition customers on the legacy DR programs at this time. During future updates to the BYOD Tariff, the Parties shall discuss whether it is appropriate to transition some or all customers from the legacy DR programs to any of the three levels within the BYOD Tariff, and, if so, what technical issues the Parties must address to enable the transition.

The Commission also notes that, in response to an information request in Docket No. 2007-0341, Hawaiian Electric indicated that it had selected a Final Award Group for a Request For Proposal related to upgrading the communication devices used

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<sup>187</sup>Hawaiian Electric's Phase 2 Proposal at 10; DER Parties' Phase 2 Proposal at 33-34; Consumer Advocate's Phase 2 Proposal at 18.

<sup>188</sup>DER Program Transition Plan at 6-7.

to control devices enrolled in the Residential Direct Load Control Program, and that Hawaiian Electric intended to submit an application for Commission review in August 2022.<sup>189</sup> In addressing this application that Hawaiian Electric intends to file, the Commission hopes that these efforts consider the possibility of transitioning legacy DR program customers to the BYOD Tariff or other new DER programs.

F.

Related Fees and Cost Recovery

Interconnection Application Fee. The Commission finds that applying the IAF to new DER customer applications is not appropriate. Thus, the Commission denies Hawaiian Electric's proposal to establish the IAF. Hawaiian Electric proposed to implement this fee originally in its Program Track Final Proposal for DPS Phase 1 to "fund enhancements and expansions in the scope

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<sup>189</sup>Docket No. 2007-0341, Letter From: K. Katsura To: Commission Re: Docket No. 2007-0341 - Review of Demand-Side Management; Responses to Commission Information Requests, filed August 5, 2022, at Hawaiian Electric's Response to PUC-HECO-IR-111.

of services covered by the CIT.”<sup>190</sup> The IAF would be tied to the system size for each application with a minimum fee of \$100.<sup>191</sup>

The Commission asked Parties to address in their Phase 2 Proposals whether Hawaiian Electric should be able to implement an IAF, whether the fee schedule proposed by Hawaiian Electric is appropriate, and whether the IAF should contribute to Hawaiian Electric’s CIT system update costs.<sup>192</sup> Hawaiian Electric maintains that its proposed IAF is a reasonable fee for the benefits DER customers receive from the automation provided by the CIT, including the enhancements and new programs built into the CIT.<sup>193</sup> The DER Parties recommend that the Commission deny the IAF, pending further investigation to assess the CIT costs holistically and determine which CIT costs should be assigned to which DER programs and which costs should be recovered through an IAF.<sup>194</sup> The Consumer Advocate expressed its support for

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<sup>190</sup>Letter From: K. Shinsato To: Commission Re: Docket No. 2019-0323 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies; “Hawaiian Electric’s DER Program Track Final Proposal,” filed on May 3, 2021 (“Hawaiian Electric’s Phase 1 Final Proposal”), at 20.

<sup>191</sup>Hawaiian Electric’s Phase 1 Final Proposal at 20.

<sup>192</sup>D&O No. 38196 at 52.

<sup>193</sup>Hawaiian Electric’s Phase 2 Proposal at 11.

<sup>194</sup>DER Parties’ Phase 2 Proposal at 34-35.

the IAF, noting, however, that additional information has been requested to address any cost causation issues.<sup>195</sup>

After review of the Parties' filings, the Commission does not believe approving the IAF at this time is appropriate. While Hawaiian Electric contends that the IAF is reasonable to fund enhancements to the CIT, Hawaiian Electric has over \$900,000 in annual funding approved in base rates for both development and maintenance of the CIT.<sup>196</sup> This funding should enable Hawaiian Electric to make any required enhancements to the CIT and to incorporate any new programs approved by the Commission. Further, imposing such a fee on new DER customers could present an unnecessary barrier for potential DER customers. As discussed above, the core principles of the design of these new tariffs include encouraging new DER customers to install paired solar and storage devices and incentivizing customers to operate their devices in a manner that benefits the grid. Imposing such a fee provides a disincentive for new DER installations, especially as Hawaiian Electric has an existing source of funding for the target of this revenue. While Hawaiian Electric has also proposed to

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<sup>195</sup>Consumer Advocate's Phase 2 Proposal at 19.

<sup>196</sup>Letter From: D. Matsuura To: Commission Re: Docket No. 2019-0323 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies; Hawaiian Electric's Responses to PUC-HECO-IRs 143-152, filed on August 6, 2021, at Hawaiian Electric's Response to PUC-HECO-IR-150, Attachment 1.

return revenues beyond what is required to fund the annual cost to customers through the Revenue Balancing Account Adjustment to avoid any excess revenue,<sup>197</sup> it is unclear whether this form of ratemaking is appropriate. Considering all the above factors, the Commission finds that this fee is not reasonable at this time.

Cost Recovery Request for CIT System Update Expenses.

In Hawaiian Electric's Phase 2 Proposal, Hawaiian Electric "withdraws the request to seek surcharge cost recovery for the CIT system update."<sup>198</sup> Thus, the Commission determines further consideration of this cost recovery request is unnecessary.

G.

Rollout of the Smart DER and BYOD Tariffs

1.

Effective Dates

Smart DER Tariff, Export Rider and Non-Export Rider.

Hawaiian Electric shall establish the Smart DER Tariff and its two riders with an effective date of July 3, 2023. Hawaiian Electric shall file tariffs for Commission review no later than 30 days prior to the effective date. This effective date should allow sufficient time for Hawaiian Electric to file the tariffs following

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<sup>197</sup>Hawaiian Electric's Response to PUC-HECO-IR-163(b)(1).

<sup>198</sup>Hawaiian Electric's Phase 2 Proposal at 10-11.

the DPS Phase 3 modeling process and review of results, for Hawaiian Electric to make any changes, subject to Commission review, for Hawaiian Electric to incorporate the tariffs into their billing processes, and for alignment with the ARD Track, particularly for TOU rates to be made available for customers enrolling in these tariffs.

BYOD Tariff: Level 1 Rider, Level 2 Rider, and Level 3 Rider. Hawaiian Electric shall establish the BYOD Tariff and its Level 1, Level 2, and Level 3 riders with an effective date of July 3, 2023. Hawaiian Electric shall file tariffs for Commission review no later than 30 days prior to the effective date. This effective date should allow sufficient time for Hawaiian Electric to file the tariffs following the DPS Phase 3 modeling process and review of results, for Hawaiian Electric to make any changes, subject to Commission review, for Hawaiian Electric to incorporate the tariffs into their billing processes, and for alignment with the ARD Track, particularly for TOU rates to be made available for customers enrolling in these tariffs. This effective date also aligns the effective date of the BYOD Tariff with the Smart DER Tariff, so that the new DER programs go live simultaneously.

This is consistent with the Commission's finding in D&O No. 38196,<sup>199</sup> and the Commission notes that the effective date should allow the additional time necessary to develop the infrastructure to support remote communications and dispatch to enable the Level 2 and Level 3 riders.

2.

#### DPS Phase 3 Modeling

As discussed above, implementation of the Smart DER Tariff and BYOD Tariffs will require Hawaiian Electric to conduct additional modeling to develop accurate and informed export rates and incentives. Hawaiian Electric shall immediately begin preparations for this modeling, so that any outstanding questions may be addressed during the Technical Conference 45 days after the filing date of this Decision and Order, as described in the Third Extension of the Procedural Schedule.

DPS Phase 3 Modeling Results. Hawaiian Electric shall file the results of its DPS Phase 3 modeling efforts by March 1, 2023, and the Parties will have an opportunity to issue information requests and file comments on the modeling results within the following six weeks. Noting the relation of these modeling efforts to the IGP process and the time necessary to

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<sup>199</sup>D&O No. 38196 at 46-47.

complete such modeling,<sup>200</sup> this should provide sufficient time for Hawaiian Electric to conduct the modeling and prepare results. Additionally, by requiring the modeling results to be filed well before the effective date of the new tariffs, there should be sufficient time to determine whether the results of the modeling provide accurate and appropriate incentives for DER customers. This approach allows for necessary review of the first iteration of export rates and incentives of the new tariffs to identify any potential improvements to the modeled methodologies. The Commission intends to file a Decision and Order on the DPS Phase 3 Modeling Results prior to the deadline for Hawaiian Electric to file tariffs for the Smart DER Tariff and its riders and the BYOD Tariff and its riders. The DPS Phase 3 Modeling Results filing shall include but not be limited to the following:

- (1) Smart DER Tariff, Export Rider's Export Rates:
  - (a) Detailed overview of the process Hawaiian Electric used to develop the export rates, in alignment with the methodologies directed by the Commission in Section V.B.
  - (b) Results of these methodologies, including all background material, native files and exhibits, and additional analysis.
  - (c) An in-depth discussion of the merits of each of the methodologies for accurately valuing exports, including the pros and cons of this approach.

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<sup>200</sup>Hawaiian Electric's Response to PUC-HECO-IR-165.

- (d) A proposed timeline for future updates, including all necessary steps such as filings and orders.
- (2) BYOD Tariff Incentives:
  - (a) Detailed overview of the process Hawaiian Electric used to develop the incentives, in alignment with the methodology directed by the Commission in Section V.C.
  - (b) Results of this methodology, including all background material, native files and exhibits, and additional analysis.
  - (c) An in-depth discussion of the merits of the methodologies for accurately valuing the contributions of customers through grid service programs, including the pros and cons of this approach.
  - (d) A proposed timeline for future updates, including all necessary steps such as filings and orders.
  - (e) A proposal for addressing the value of controlled energy exports under the BYOD Tariff, as discussed in Sections V.C.1 and V.C.7.

3.

Marketing, Education, and Outreach Efforts

As discussed throughout this Decision and Order, the new DER programs represent a significant change in the incentives for DER customers, reflecting the need for DER customers to operate their devices in a manner that benefits the evolving grid. As new rates and incentives are established, it is very important that Hawaiian Electric engage in targeted, effective ME&O efforts.

The new DER programs will require effective marketing so that they are successful and provide the intended benefits to Hawaiian Electric's grid through additional grid service resources. New DER customers will need to be educated on what underlying tariffs and other programs (e.g., grid service programs) are available and how they can best use their devices to minimize their bills and maximize their contribution to the grid. Additionally, DER customers who are subject to transition requirements will need outreach so that they are aware well in advance of the required transition to a new tariff and understand the new tariff, including any operational changes or other changes necessary to comply with the transition.

Supplement to the Program Transition Plan.

The Commission required Hawaiian Electric to file a PTP in response to guidance on how customers on existing tariffs and programs will be treated once the new tariffs become effective.<sup>201</sup> Given the updated and additional guidance provided in this Decision and Order, the Commission finds that Hawaiian Electric shall develop its PTP Supplement to describe how Hawaiian Electric plans to coordinate customer transitions, including all planned ME&O efforts. Hawaiian Electric shall file the PTP Supplement by February 1, 2023. The PTP Supplement shall comprehensively

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<sup>201</sup>D&O No. 38196 at 48-49.

describe all ME&O efforts surrounding the new DER programs and the transition of customers from existing DER programs, including examples of how Hawaiian Electric may approach customers and what other parties or partnerships Hawaiian Electric may leverage to pursue ME&O efforts. Though the Commission expects that Hawaiian Electric will collaborate with the Parties during the development of its ME&O efforts, the Parties will also have an opportunity to issue information requests and file comments on the PTP Supplement within the six weeks following its submission. The PTP Supplement should include but not be limited to the following items:<sup>202</sup>

- (1) The transition requirements for customers on each DER tariff (including all interim tariffs, all Net Energy Metering tariffs, and the SIA), including the process, any required equipment, any operational changes, and any costs associated with these requirements.
- (2) The assistance options that Hawaiian Electric is making available to customers to meet transition requirements.
- (3) The consequences of not meeting transition requirements if a customer is required to transition from an interim tariff.
- (4) An inventory of what customers will be required to transition to each rider of the Smart DER Tariff within 2023 and how Hawaiian Electric plans to engage these customers in preparation of this

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<sup>202</sup>The Commission notes that some of these items may overlap with requirements in Hawaiian Electric's FIP. Where necessary, Hawaiian Electric may reference and describe ongoing efforts that have also been reported within the FIP.

transition, including any materials that Hawaiian Electric plans to use.

- (5) Details regarding how Hawaiian Electric plans to promote the Smart DER Tariff for both new and existing DER customers, including any materials that Hawaiian Electric plans to use.
- (6) Details regarding how Hawaiian Electric plans to promote the BYOD Tariff for both new and existing DER customers, including any materials that Hawaiian Electric plans to use.
- (7) Details regarding how Hawaiian Electric plans to engage existing and new SDP customers regarding the opportunity to transition to any of the levels of the BYOD Tariff following the initial emergency period, including any materials that Hawaiian Electric plans to use.
- (8) Necessary steps to enable customers enrolling on the Smart DER Tariff and BYOD Tariff to receive both advanced meters and enroll on TOU rates immediately upon enrollment, as early as the effective date of the tariffs on July 3, 2023.
- (9) All other steps necessary to enable the effective date of the Smart DER Tariff and BYOD Tariff, such as updates to Hawaiian Electric's billing processes, for example.
- (10) Proposed updates to reporting requirements for the Smart DER Tariff and BYOD Tariff.
- (11) Plans for the establishment of annual performance methodology for the BYOD Tariffs, to be reported in the annual A&S Report as discussed above.
- (12) An update on the status of the development of a DER credit donation program, targeting low-income customers and customers without access to DERs.
- (13) Any other supplemental information describing Hawaiian Electric's ME&O efforts related to the launch of the Smart DER and BYOD Tariffs.

H.

DPS Phase 3 and the Third Extension of the Procedural Schedule

Considering the additional work necessary to establish the new DER programs will continue through the first half of 2023, with regular updates following sometime thereafter, the Commission finds it appropriate to establish a procedural schedule for this period as DPS Phase 3. DPS Phase 3 will focus on the rollout of the Smart DER Tariff and the BYOD Tariff, including the modeling to determine Smart DER Tariff Export rates and BYOD Tariff incentives, the resolution of any necessary issues to enable this rollout, the development of ME&O efforts to complement the rollout of these tariffs, and the incorporation of the new DER programs into regular reporting by Hawaiian Electric.

Pursuant to D&O No. 37066, the Commission retains its authority to modify the procedural schedule upon motion or stipulation by the Parties and approval by the Commission, or upon the Commission's own motion.<sup>203</sup> Thus, the Third Extension of the Procedural Schedule incorporates the additional findings and schedule laid out by the Commission in this Decision and Order to facilitate the rollout of the Smart DER Tariff and BYOD Tariff. The next item on the Procedural Schedule of the Program Track following this Decision and Order will be a Technical Conference

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<sup>203</sup>D&O No. 37066 at 24.

hosted by the Commission to review any immediate issues and questions from the Parties. Following this Technical Conference, there are no scheduled meetings on the Procedural Schedule until the first update to the tariffs, but the Parties are free to request additional meetings with or without the Commission to discuss outstanding questions. The Procedural Schedule for DPS Phase 3 is as follows:

**Third Extension of the Procedural Schedule**

<b>Procedural Event</b>	<b>Deadline</b>
Commencement of DPS Phase 3	Filing date of the instant Decision and Order
Technical Conference to Discuss Outstanding Questions and Modeling Efforts	45 days after this Decision and Order
Supplement to the Program Transition Plan	February 1, 2023
Filing of DPS Phase 3 Modeling Results	March 1, 2023
Information Requests from Parties and the Commission	March 15, 2023
Hawaiian Electric's Responses to Information Requests	March 29, 2023
Party Comments on DPS Phase 3 Modeling Results	April 12, 2023
DPS Phase 3 Order	May 2023
Filing of Smart DER Tariff and its Riders, and BYOD Tariff and its Riders	June 2, 2023
Effective date of Smart DER Tariff and its Riders, and BYOD Tariff and its Riders	July 3, 2023
Closure of interim tariffs and the SIA Tariff	October 3, 2023

This Third Extension of the Procedural Schedule may be amended: (1) as agreed to in writing by the Parties and approved

by the Commission; or (2) upon the Commission's own motion. The Commission recognizes and appreciates the efforts the Parties have made to develop the new DER programs to this point, and the Commission looks forward to continuing to work with the Parties during DPS Phase 3 to implement and iterate on long-term, successful DER programs.

I.

Virtual Net Metering or Self-Consumption Program

The Commission asked the Parties to determine whether a Virtual Net Metering Program Pilot is an appropriate undertaking for the utility in DPS Phase 2.<sup>204</sup> The Parties agree that Hawaiian Electric should pursue such a program, which may expand access to DERs to low- and moderate-income customers and may also be referred to as a Virtual Self-Consumption Program.<sup>205</sup> The DER Parties disagree with Hawaiian Electric and the Consumer Advocate, however, who assert that a pilot is not necessary prior to program implementation.<sup>206</sup> The Commission notes that Hawaiian Electric has indicated its intent to develop and

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<sup>204</sup>D&O No. 38196 at 52.

<sup>205</sup>Hawaiian Electric's Phase 2 Proposal at 11-12; DER Parties' Phase 2 Proposal at 36-37; Consumer Advocate's Phase 2 Proposal at 19-20.

<sup>206</sup>DER Parties' Phase 2 Proposal at 37.

perform a pilot within the Innovation Pilot Framework in the PBR Docket, Docket No. 2018-0088.<sup>207</sup> The Commission notes that the Legislature recently requested that the Commission establish a proceeding to examine low- and moderate-income rate discounts, bill credits, and direct payments, as well as other customer-centric solutions, to lessen the energy burden on low- and moderate-income customers.<sup>208</sup> Hawaiian Electric shall consider collaborating on the development of the Virtual Net Metering or Self-Consumption Pilot and/or Program with the parties in such proceeding that the Commission intends to establish, in addition to the PBR Docket. The Commission will address this pilot in the appropriate docket following any filings from Hawaiian Electric, including the indicated Notice of Intent.

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<sup>207</sup>Hawaiian Electric's Phase 2 Proposal at 12.

<sup>208</sup>See Senate Concurrent Resolution No. 48, Senate Draft 1, Session Laws Hawaii of 2022, adopted on April 19, 2022, available at [https://www.capitol.hawaii.gov/session2022/bills/SC\\_R48\\_SD1\\_PDF](https://www.capitol.hawaii.gov/session2022/bills/SC_R48_SD1_PDF); see also Senate Resolution No. 43, Senate Draft 1, Session Laws of Hawaii 2022, adopted on April 6, 2022, available at: [https://www.capitol.hawaii.gov/session2022/bills/S\\_R43\\_SD1\\_pdf](https://www.capitol.hawaii.gov/session2022/bills/S_R43_SD1_pdf); and House Resolution No. 43, House Draft 1, Session Laws of Hawaii 2022, adopted on April 4, 2022, available at: [https://www.capitol.hawaii.gov/session2022/bills/H\\_R43\\_HD1\\_pdf](https://www.capitol.hawaii.gov/session2022/bills/H_R43_HD1_pdf). These resolutions explicitly reference the regulatory initiatives currently underway in this docket, which may address rate design for all customers and specifically provide for proposed approaches to address consideration of relief for low- and moderate-income customers.

VI.

SUMMARY OF FINDINGS AND CONCLUSIONS

Based on the foregoing, the Commission finds and concludes as follows:

1. Based on its review of the Final Proposals submitted by the Parties, as well as the technical conference and entire record, the Commission does not approve, in full, any specific proposal in its entirety.

2. Rather, the Commission, by this Decision and Order, finalizes DPS Phase 2 and initiates and provides guidance for the progression of DPS Phase 3.

3. The Commission has selected components from different proposals to implement the Smart DER Tariff and BYOD Tariff, as well as address other related outstanding issues included in DPS Phase 2.

4. The Commission finds that additional modeling is desirable to develop an accurate valuation for initial export rates for the Smart DER Tariff Export Rider, and that Hawaiian Electric shall model at least the three methodologies described in Section V.B.1 in DPS Phase 3 for the Parties and Commission to review prior to final decision-making regarding the methodology for establishing the initial export rates.

5. The Commission finds that it is appropriate to align the export time periods for the Smart DER Tariff Export Rider

with the TOU time periods for the TOU rates and, therefore, establishes three weekday rate periods: the overnight period (9 p.m. to 9 a.m.), daytime period (9 a.m. to 5 p.m.), and evening peak period (5 p.m. to 9 p.m.).

6. The Commission finds that a lock-in period of export rates for new customers is necessary to balance the need for customer certainty in the value of their investment with the need for having accurate, updated rates. As a result, new customers enrolling in the Smart DER Tariff Export Rider shall be afforded a period of seven years during which their export rates will be locked-in, after which such rates shall be adjusted to the current export rates and updated accordingly thereafter.

7. The Commission finds it necessary to allow Smart DER Tariff export customers additional avenues to receive compensation for their exports, while also encouraging customers to participate in a grid service program. Therefore, export credits shall be classified as either grid service or non-grid service export credits. Any excess non-grid service export credits will be allowed to roll forward monthly but shall be forfeited every 12 months. Any excess grid service export credits will be allowed to roll forward without expiration.

8. Due to the developing landscape of the grid and plans for additional renewables and storage, the Commission finds it necessary to establish a framework for regular updates to

the export compensation rate. The Commission determines that Hawaiian Electric shall update the export rates for the Smart DER Tariff Export Rider regularly using the best available data, based on the methodologies described above and applying an update framework to be determined in DPS Phase 3.

9. The Commission finds that, among other things, given the evolving landscape of available federal tax incentives for DERs, it is appropriate to implement the BYOD Tariff as soon as practicable, which shall include the following tariff capacities: 70 MW for HECO, 17 MW for HELCO, 19.9 MW for MECO (split by island at 17 MW for Maui, 1.45 MW for Lanai, and 1.45 MW for Molokai).

10. To align the commitment of SDP customers and reflect the value of the Upfront Incentives received, the Commission determines that BYOD Tariff customers shall be required to commit to enrollment in the Tariff for a period of ten years.

11. BYOD Tariff customers may transition to another level after one year, but will not receive additional Upfront Incentives for transitions to a higher level and will be required to return a prorated portion of Upfront Incentives received when transitioning to a lower level.

12. BYOD Tariff Level 1, Scheduled Dispatch: Customers shall be required to commit to dispatching their

Committed Capacity 365 days per year for a two-hour time period selected by the customer during the evening peak period for a period of ten years.

13. BYOD Tariff Level 2, Utility Dispatch: Customer resources shall be required to respond to Hawaiian Electric's remote dispatch by dispatching their Committed Capacity for one to two hours, typically during the evening peak period, with 24-hour day-ahead notice and shall commit to participating in up to 156 events per year for a period of ten years, with the ability to opt out of up to three events per year.

14. BYOD Tariff Level 3, System Grid Services: Once established in July 2023, Level 3 will include two grid services: Capacity Load Reduction and Capacity Load Build. Capacity Load Reduction customers shall be required to respond to Hawaiian Electric's signal to dispatch their Committed Capacity for two to four hours, typically during the evening peak period, with 24-hour day-ahead notice, and Capacity Load Build customers shall be required to respond to Hawaiian Electric's signal to charge their DER device at their Committed Capacity for two to four hours, typically during the daytime period, with 24-hour day-ahead notice and all customers shall commit to participating in up to 365 combined events per year for all grid services for a period of ten years.

15. To determine the appropriate compensation for the Upfront Incentive and Monthly Incentive for each of BYOD Tariff Levels 1, 2, and 3, based on the customer's Committed Capacity (in kW), the Commission finds it necessary for Hawaiian Electric to conduct additional modeling in DPS Phase 3 as described in Section V.C.5, which the Parties and the Commission will review prior to final decision-making.

16. To ensure that BYOD Tariff customers receive a reasonably accurate valuation of grid services provided, Hawaiian Electric will be required to update the incentive structure, including both the Upfront Incentive and Monthly Incentive, regularly using the best available data so that customers' incentives reasonably reflect the value of their grid service contributions.

17. The Commission finds that, because BYOD Tariff customers will have AMI meters installed at or prior to enrollment, it is appropriate to assess performance by auditing participating customers using AMI meter data, which will eliminate the need to develop a complicated true-up mechanism that may incur excessive costs. Accordingly, Hawaiian Electric shall report on the performance measurement of BYOD Tariff customers in its Annual A&S Report.

18. Based on the Commission's finding that the Smart DER Tariff and BYOD Tariff will be open for enrollment as

soon as practicable, the Commission reiterates its previous finding in DPS Phase 1 that Smart DER Tariff and BYOD Tariff customers shall receive an advanced meter and be required to enroll in TOU rates upon enrollment, subject to available options as established pursuant to D&O No. 38680.

19. The Commission finds that the SIA Tariff should be closed to new customers no later than three months after the Smart DER Tariff becomes effective, or October 1, 2023. Existing SIA customers, as well as those in the queue prior to its closure, shall be provided the option to transition to either of the riders on the Smart DER Tariff.

20. The Commission finds that interim tariffs shall be closed no later than three months after the Smart DER Tariff becomes effective, or October 1, 2023, and clarifies that exporting and non-exporting interim tariffs shall remain open until the earlier of October 1, 2023, or until capacity is reached.

21. The Commission finds that it is not appropriate to order the transition of the legacy DR programs at this time; however, in the future, the parties should discuss whether it is appropriate to transition customers from the legacy DR programs to any of the BYOD Tariff levels and any challenges and issues associated therewith.

22. The Commission finds that the IAF is not appropriate at this time. Instead, the Commission concludes that

current funding is available for the development and maintenance of the CIT and an additional fee could have a chilling effect on the ability to enroll new DER customers.

23. In response to Hawaiian Electric's withdrawal of its request to seek surcharge cost recovery for the CIT system update, the Commission determines that such request is moot.

24. As discussed above, the Commission directs Hawaiian Electric to develop a PTP Supplement that addresses the items identified in Section V.G.3 above, including Hawaiian Electric's planned ME&O efforts.

25. Hawaiian Electric shall submit its PTP Supplement by February 1, 2023.

26. The Commission shall convene a DPS Phase 3 Technical Conference within 45 days from the date of this Decision and Order, to address any immediate issues and questions from the Parties.

27. The Procedural Schedule for DPS Phase 3 is as identified in Section V.H above.

28. In response to Hawaiian Electric's indication of its intent to develop and perform a Virtual Net Metering or Self-Consumption Program Pilot within the Innovative Pilot Framework in the PBR Docket, the Commission notes that it will address this program and/or pilot in the appropriate docket following any filings.

VII.

ORDERS

THE COMMISSION ORDERS:

1. Hawaiian Electric shall file the Smart DER Tariff and BYOD Tariff, pursuant to the specifications provided in Section V above, no later than 30 days prior to the effective date of the Tariffs on July 3, 2023.

2. The Smart DER Tariff and BYOD Tariff, Levels 1, 2, and 3, shall be effective on July 3, 2023, unless the Commission orders otherwise.

3. Hawaiian Electric shall close the SIA Tariff to new customers no later than October 3, 2023, or three months after the effective date of the Smart DER Tariff; however, existing customers shall have the option to transition to the Smart DER Tariff.

4. Hawaiian Electric shall close all exporting and non-exporting interim DER tariffs to new customers no later than October 3, 2023, or three months after the effective date of the Smart DER Tariff.

5. All exporting interim tariff customers shall be required to transition to the permanent DER programs no later than seven years after their interim tariff enrollment date, with a grace period of six months following the effective date of the Smart DER Tariff, as provided in Section V.E.2 above.

6. All non-exporting interim tariff customers shall have the option to transition to the Smart DER Tariff.

7. Hawaiian Electric shall report on the performance measurement of BYOD Tariff customers in its Annual A&S Report in Docket No. 2007-0341, beginning with 2023 data in the 2024 A&S Report.

8. Legacy DR programs shall not be transitioned to the new DER programs at this time.

9. Hawaiian Electric shall not be authorized to implement an IAF.

10. As a result of Hawaiian Electric's withdrawal of its request to seek surcharge cost recovery for the CIT system update, this request is dismissed as moot.

11. DPS Phase 3 shall commence upon issuance of this Decision and Order and shall include a Technical Conference pursuant to guidance provided in Section V.H above.

12. The DPS Phase 3 Procedural Schedule shall govern the remainder of the proceeding related to the Program Track, unless and until the Commission orders otherwise.

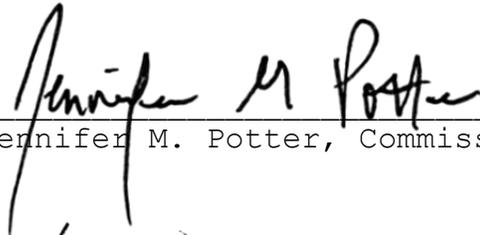
13. Hawaiian Electric shall file a supplement to the DER Program Transition Plan by February 1, 2023, incorporating the items outlined above in Section V.G.3.

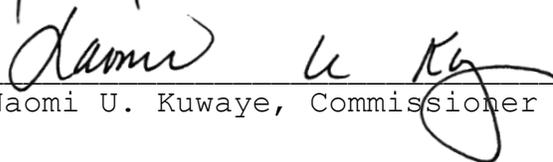
14. Hawaiian Electric shall file its DPS Phase 3 Modeling Results by March 1, 2023, incorporating the items outlined above in Section V.G.2.

DONE at Honolulu, Hawaii OCTOBER 31, 2022.

PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

By   
\_\_\_\_\_  
Leodoloff R. Asuncion, Jr., Chair

By   
\_\_\_\_\_  
Jennifer M. Potter, Commissioner

By   
\_\_\_\_\_  
Naomi U. Kuwaye, Commissioner

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Keira Y. Kamiya  
Commission Counsel

2019-0323.ljk

CERTIFICATE OF SERVICE

The foregoing order was served on the date it was uploaded to the Public Utilities Commission's Document Management System and served through the Document Management System's electronic Distribution List.

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COMMISSION

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