

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

----- In the Matter of ----- )  
 )  
PUBLIC UTILITIES COMMISSION )  
 )  
Instituting a Proceeding to )  
Investigate Integrated Grid )  
Planning. )  
\_\_\_\_\_ )

DOCKET NO. 2018-0165

ORDER NO. 35569

INSTITUTING A PROCEEDING TO  
INVESTIGATE INTEGRATED GRID PLANNING

PUBLIC UTILITIES  
COMMISSION

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INVESTIGATE INTEGRATED GRID PLANNING

By this Order, the State of Hawaii Public Utilities Commission ("commission") institutes a proceeding to investigate the integrated grid planning ("IGP") process proposed by Hawaiian Electric Company, Inc. ("HECO"), Hawaii Electric Light Company, Inc. ("HELCO"), and Maui Electric Company, Limited ("MECO") (individually "Company," collectively, the "HECO Companies" or "Companies") in the IGP Report,<sup>1</sup> and the resulting plans.

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<sup>1</sup>"Planning Hawaii's Grid for Future Generations, Integrated Planning Report", filed on March 1, 2018 ("IGP Report"), available at [https://www.hawaiianelectric.com/Documents/about\\_us/ourcommitment/20180301\\_IGP\\_final\\_report.pdf](https://www.hawaiianelectric.com/Documents/about_us/ourcommitment/20180301_IGP_final_report.pdf).

I.

INTRODUCTION

Electric utilities use resource planning to identify long-term investments that can reliably meet electricity demand and public policy goals at a reasonable cost.<sup>2</sup> With their IGP Report, the HECO Companies propose an ambitious and holistic new approach to power system planning. If implemented successfully, this new IGP process could accelerate the State's progress towards a clean energy future.

The State is on the leading edge of distributed energy resource ("DER") adoption, where DERs can be sourced as cost-effective alternatives to system investments. The IGP Report broadly proposes a way to connect critical grid-planning processes and priorities in innovative ways that could respond to the State's needs and reduce costs to customers. The success of this new planning process depends on the details of implementation, which will come into sharper focus as the process proceeds. The commission opens this docket to investigate the proposed IGP process, ensure meaningful stakeholder engagement, and provide guidance as the HECO Companies implement the next round of planning.

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<sup>2</sup>See Fredrich Karl, Andrew Mills, Luke Lavin, Nancy Ryan, and Arne Olsen, The Future of Electricity Resource Planning, LBNL (September 2016) ("The Future of Electricity Resource Planning"), at 3, available at <https://emp.lbl.gov/sites/all/files/lbnl-1006269.pdf>.

## II.

### POWER SYSTEM PLANNING OVERVIEW AND CONTEXT

#### A.

##### Electricity Resource Planning

Resource planning for electric generation began in the late 1970s during an era of transition with declining electricity demand, rising costs, and new federal environmental regulations.<sup>3</sup> The resource planning process provides a forum for regulators, electric utilities, and stakeholders "to evaluate the economic, environmental, and social benefits and costs of different investment options."<sup>4</sup> At its best, this process: (1) facilitates a discussion on goals, challenges, and strategies that shape utility decisions; and (2) transparently reconciles various competing interests, including ratepayer costs, environmental and policy goals, and providing necessary revenue to fund utility operations and investments.<sup>5</sup>

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<sup>3</sup>See The Future of Electricity Resource Planning at 3, 8.

<sup>4</sup>See The Future of Electricity Resource Planning at 3.

<sup>5</sup>See The Future of Electricity Resource Planning at 8.



B.

National Evolution of Planning Methods

An integrated resource plan "is a utility plan for meeting forecasted annual peak and energy demand, plus some established reserve margin, through a combination of supply-side and demand-side resources over a specified future period."<sup>6</sup> Integrated resource plans have the goal of ensuring long-term reliability and just and reasonable rates. As the grid and resource mix in many jurisdictions has evolved, utilities and their regulators across the U.S. have grappled with how to improve the planning process to accommodate these changes and incorporate new policy objectives.

Several states have begun to examine more significant modifications to the power system planning process by introducing new distribution system planning methods to better account for DER adoption and to modernize distribution system infrastructure and operations. Regulators at the New York Public Service Commission have led a push to establish distribution system platforms.<sup>7</sup>

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<sup>6</sup>See Rachel Wilson and Bruce Biewald, Best Practices in Electric Utility Integrated Resource Planning: Examples of State Regulations and Recent Utility Plans, Regulatory Assistance Project and Synapse Energy Economics, (June 2013) at 2, available at <https://www.raponline.org/wp-content/uploads/2016/05/rapsynapse-wilsonbiewald-bestpracticesinirp-2013-jun-21.pdf>.

<sup>7</sup>See Reforming the Energy Vision, available at <https://rev.ny.gov/>.

In California, distribution resource planning is maturing into an annual grid needs assessment, a method for distribution investment deferral, and guidance for grid modernization.<sup>8</sup> Similar efforts are underway nationwide.<sup>9</sup> Although many of these efforts are in their early stages, collectively, they clearly signal a new focus on the distribution system and deeper consideration of its role in serving evolving customer needs.

In Minnesota, stakeholders are exploring an integration of performance-based compensation and planning;<sup>10</sup> in Colorado, Xcel Energy is integrating competitive bidding processes into its planning functions;<sup>11</sup> and the California Public Utilities Commission ("CPUC") directed utilities to optimize their resource plans to achieve California's carbon reduction targets.<sup>12</sup>

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<sup>8</sup>See CPUC Rulemaking (r.) 14-08-013.

<sup>9</sup>See Autumn Proudlove, Brian Lips, David Sarkisian, Achyut Shrestha, 50 States of Grid Modernization, (May 2017), available at [https://nccleantech.ncsu.edu/wp-content/uploads/GridMod\\_Q12017\\_FINALREPORT.pdf](https://nccleantech.ncsu.edu/wp-content/uploads/GridMod_Q12017_FINALREPORT.pdf).

<sup>10</sup>See e21 Initiative, PHASE II REPORT on implementing a framework for a 21<sup>st</sup> century electric system in Minnesota, (December 2016), available at [http://e21initiative.org/wp-content/uploads/2018/01/e21 Initiative PhaseII Report 2016.pdf](http://e21initiative.org/wp-content/uploads/2018/01/e21%20Initiative%20PhaseII%20Report%202016.pdf).

<sup>11</sup>See "Xcel Energy submits 2016 Colorado Electric Resource Plan" (May 31, 2016), available at [https://www.xcelenergy.com/company/media room/news releases/xcel energy submits 2016 colorado electric resource plan](https://www.xcelenergy.com/company/media%20room/news%20releases/xcel%20energy%20submits%202016%20colorado%20electric%20resource%20plan).

<sup>12</sup>See "Decision Setting Requirements for Load Serving Entities Filing Integrated Resource Plans" (February 8, 2018), available at



Meanwhile, utilities in Arizona, Indiana, New Mexico, North Carolina, and Oregon have proposed energy storage solutions in their integrated resource plans.<sup>13</sup>

Utilities, regulators, and stakeholders across the nation are striving to innovate planning activities. Together, these innovations amount to a paradigm shift. As discussed in greater detail below, the IGP Report is both a product of this paradigm shift, keeping pace with innovations from elsewhere, and a potential model for others who engage with the challenges and opportunities in the transition to a clean energy future.

C.

Evolution of Planning in Hawaii

1.

Integrated Resource Planning: 1990 - 2014

"Concerned about significant fluctuations in demand and energy growth rates, rising consumer energy prices in spite of relatively stable fuel costs, the emerging importance of

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<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K771/209771632.PDF>.

<sup>13</sup>See Peter Maloney, Energy Storage Gets a Bigger Seat at the Utility Planning Table, (November 7, 2017), available at <https://www.utilitydive.com/news/energy-storage-gets-a-bigger-seat-at-the-utility-planning-table/510216/>.

environmental issues and cost-effective technologies and our unabated heavy dependency upon fossil fuel oil, the commission opened a proceeding in January 1990 to implement integrated resource planning in the State of Hawaii."<sup>14</sup> In 1992, the commission adopted a Framework to govern integrated resource planning ("IRP").<sup>15</sup> Between 1993 and 2007, each Company filed integrated resource plans, pursuant to the Framework. In November of 2008, the commission suspended its review of the HECO Companies' integrated resources plans, pending a revision of the Framework.<sup>16</sup>

In 2011, after several years of stakeholder discussions, the commission adopted significant revisions to the IRP Framework (the "Revised Framework").<sup>17</sup> These revisions were designed to "allow for a more effective, inclusive and comprehensive planning process that acknowledges the dynamic and constantly changing utility environment . . . ." <sup>18</sup> In adopting the Revised Framework, the commission incorporated scenario planning "to capture

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<sup>14</sup>In re Public Util. Comm'n, Docket No. 2009-0108, Decision and Order, filed on March 14, 2011 ("Framework Order"), at 3 (citing Order No. 10458, filed on January 10, 1990, in Docket No. 6617, at 1, quotations omitted).

<sup>15</sup>Framework Order at 3.

<sup>16</sup>Framework Order at 9, 13-14, 18.

<sup>17</sup>"A Framework for Integrated Resource Planning, March 9, 1992, Revised: March 14, 2011," filed as Exhibit A to the Framework Order.

<sup>18</sup>Framework Order at 2.



variations in planning assumptions and forecasts as well as high level planning estimates of the costs and benefits of resource options[,]” and an independent entity to promote a timely, transparent, and meaningful process.<sup>19</sup>

On April 28, 2014, for reasons thoroughly detailed in the Order closing Docket No. 2012-0036, the commission rejected the HECO Companies’ integrated resource plans filed pursuant to the Revised Framework, and suspended the IRP planning cycle.<sup>20</sup> The commission then opened several proceedings “to provide critical analyses and information” that the commission expected to be provided during the IRP process.<sup>21</sup> Subsequently, the commission required each Company to file a Power Supply Improvement Plan (“PSIP”), as discussed further in the section that follows.

In addition, the commission, through its Inclinations on the Future of Hawaii’s Electric Utilities, attached to Order No. 32052 as Exhibit A (“Inclinations”), provided its perspectives on the vision, business strategies, and regulatory policy changes required to align the HECO Companies’ business model with customers’ interests and the State’s public policy goals.

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<sup>19</sup>Framework Order at 2.

<sup>20</sup>See In re Public Util. Comm’n, Docket No. 2012-0036, Order No. 32052, filed on April 28, 2014 (“Order No. 32052”), at 80.

<sup>21</sup>Order No. 32052 at 72.

In the Inclinations, the commission concluded that it was incumbent on the HECO Companies to develop "a sustainable business model that explicitly governs the Companies' capital expenditure plans, major programs, and projects submitted for regulatory approval."<sup>22</sup>

2.

Power Supply Improvement Plans and Related Efforts: 2014-2017

To provide for effective system planning in the period after the filing of the last IRP, the commission ordered MECO, HECO, and HELCO, to develop PSIPs.<sup>23</sup> On August 7, 2014, the commission consolidated the PSIPs into a single docket (Docket No. 2014-0183).<sup>24</sup> The commission intended the PSIP process to be an interim measure to address the shortcomings of the IRP process and resulting plans. The commission explained that "the power supply systems of each utility are becoming more complex and challenging as greater quantities of diverse renewable energy resources are integrated with older, relatively inflexible base

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<sup>22</sup>Inclinations at 29-30.

<sup>23</sup>See In re Public Util. Comm'n, Docket No. 2014-0183, Order No. 32257, filed on August 7, 2014 ("Order No. 32257"), at 2.

<sup>24</sup>See Order No. 32257 at 5.

load generation resources."<sup>25</sup> The commission directed the Companies to:

include actionable strategies and implementation plans to expeditiously retire older, less-efficient fossil generation, reduce must-run generation, increase generation flexibility, and adopt new technologies such as demand response and energy storage for ancillary services, and institute operational practice changes, as appropriate, to enable integration of a diverse portfolio of additional low cost renewable energy resources, reduction of energy costs and improvements in generation operational efficiencies.<sup>26</sup>

In addition, with respect to the distribution system, the commission directed the Companies to build upon prior efforts to adapt conventional distribution system planning to account for the extraordinary levels of DER adoption in Hawaii.<sup>27</sup> The Reliability Standards Working Group developed the "Proactive Approach," to "plan for the aggregate system impacts from expected [distributed generation ("DG")] development in order to accommodate higher penetration levels[;]" coordinate interconnection planning and "identify opportunities where infrastructure upgrades can accommodate both DG and load[;]" and "employ enhanced tools for modeling DG to inform both system

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<sup>25</sup>Order No. 32257 at 2.

<sup>26</sup>Order No. 32052 at 72-73.

<sup>27</sup>See In re Public Util. Comm'n, Docket No. 2011-0206, Order No. 32053, filed on April 28, 2014 ("Order No. 32053"), at 50-62.



and distribution-level planning and operations."<sup>28</sup> The commission approved the Proactive Approach in 2014.<sup>29</sup>

The Companies' Distributed Generation Interconnection Plan, filed in Docket No. 2014-0192, included analyses of investments in the distribution system that could enable greater levels of DER, as well as technology assessments and policy recommendations.<sup>30</sup> The Companies supplemented and expanded these studies as part of the system- and circuit-level DER integration analyses included in the PSIPs.<sup>31</sup>

After multiple revisions and extensive stakeholder engagement, the HECO Companies filed their final PSIPs, on December 23, 2016.<sup>32</sup> The commission found "significant improvements in the [December 2016 PSIPs] over previous PSIPs" and observed that the near-term action plans and long-range analysis in the December 2016 PSIPs "provide useful context for evaluating pending and future operational decisions and resource

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<sup>28</sup>Order No. 32053 at 16, 18 (citations omitted).

<sup>29</sup>Order No. 32053 at 122.

<sup>30</sup>"Hawaiian Electric Companies' Distributed Generation Interconnection Plan, Books 1-2," filed August 26, 2014, in Docket No. 2014-0192.

<sup>31</sup>See "Hawaiian Electric Companies' PSIPs Update Report, Filed December 23, 2016, Books 1-4," filed on December 23, 2016, in Docket No. 2014-0183 ("December 2016 PSIPs"), Appendix N.

<sup>32</sup>See December 2016 PSIPs.



acquisition alternatives."<sup>33</sup> In accepting the December 2016 PSIPs, and in response to the HECO Companies' June 2017 Draft Report, "Modernizing Hawaii's Grid for Our Customers,"<sup>34</sup> the commission directed the HECO Companies to file with the commission, by March 1, 2018, "a report that details the Companies' planning approach and schedule for the next round of integrated planning."<sup>35</sup>

### III.

#### IGP REPORT

##### A.

#### Planning Steps

On March 1, 2018, the HECO Companies filed the IGP Report with the commission. The IGP Report proposes an ambitious leap forward from traditional system planning. The HECO Companies propose to merge three separate planning processes - generation, transmission, and distribution - while simultaneously integrating solution procurement into this merged process, with the goal of

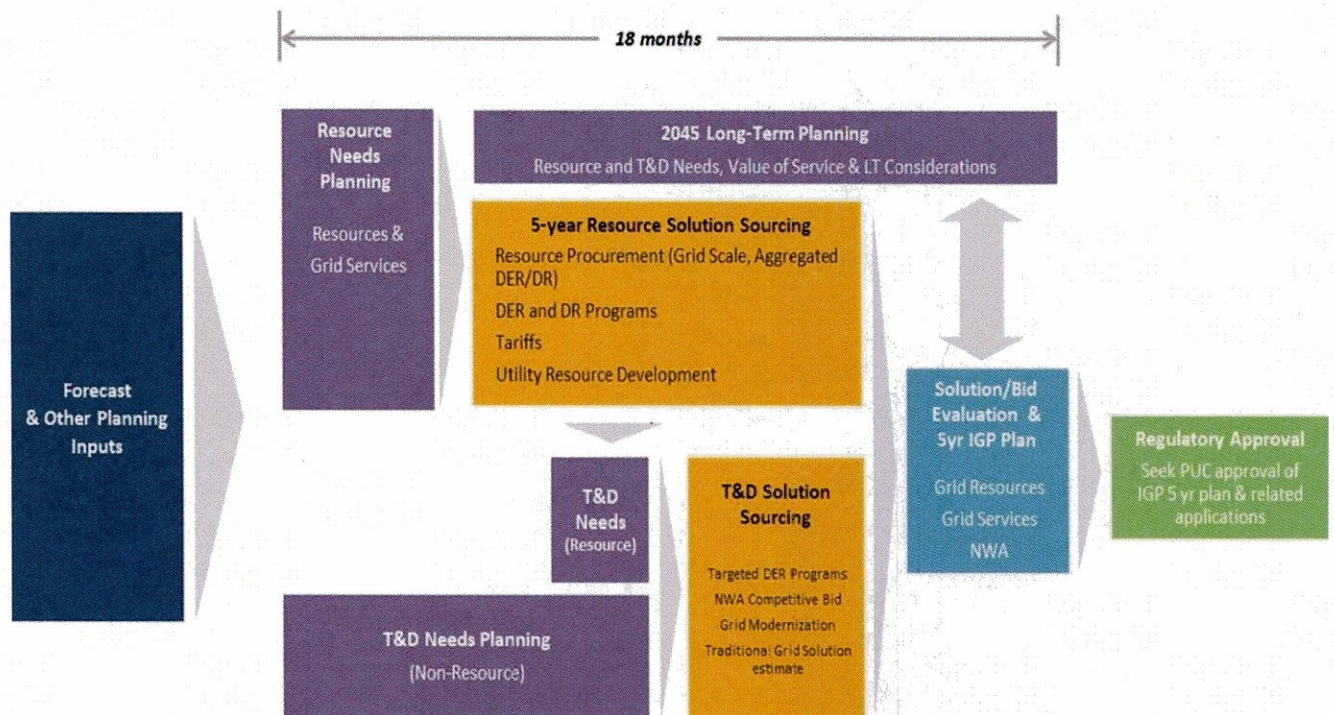
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<sup>33</sup>In re Public Util. Comm'n, Docket No. 2014-0183, Order No. 34696, filed on July 14, 2017 ("Order No. 34696"), at 2, 4.

<sup>34</sup>See "HECO Companies' Grid Modernization Strategy (Draft) for Stakeholder Review and Comment," filed on June 30, 2017, at 22-23 ("Draft Grid Modernization Strategy"), available online at [https://www.hawaiianelectric.com/Documents/about us/investing in the future/grid modernization strategy draft.pdf](https://www.hawaiianelectric.com/Documents/about%20us/investing%20in%20the%20future/grid%20modernization%20strategy%20draft.pdf).

<sup>35</sup>See Order No. 34696 at 49-50.

identifying gross system needs, coordinating solutions, and developing an optimized, cost-effective portfolio of assets.<sup>36</sup> Integrating the planning processes should allow a variety of distributed and grid-scale resources to provide power generation and ancillary services, potentially resulting in significant customer savings. The proposed IGP planning process is represented in the diagram below.<sup>37</sup>



According to the IGP Report, the first step in the process will begin before system planning commences. The HECO Companies propose to form a working group to assist in

<sup>36</sup>See IGP Report at 14.

<sup>37</sup>IGP Report at 14.



development of the forecasts and input assumptions that will drive the planning process. The HECO Companies broadly categorize these inputs as: (1) Planning Requirements - such as system reliability and hosting capacity; (2) Input Assumptions - including market driven metrics like fuel costs; (3) Fixed Assumptions - i.e., metrics that the HECO Companies can control, such as PPA renewals or resource retirements; and (4) Customer Needs and Policy Goals.<sup>38</sup>

In step two, resource, transmission, and distribution needs will be collectively identified. The HECO Companies propose to use advanced modeling software to identify an optimal portfolio of solutions necessary to meet system needs, policy goals, and system reliability standards.<sup>39</sup>

Step three begins with the collective system needs identified in step two. The HECO Companies propose to identify resource, transmission, and distribution solutions through the establishment of a marketplace through procurements, pricing, and programs.<sup>40</sup>

Step four is evaluating and optimizing these resource, transmission, and distribution solutions. The HECO Companies propose to screen potential solutions through system modeling

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<sup>38</sup>See IGP Report, Appendix B at 2.

<sup>39</sup>See IGP Report at 2.

<sup>40</sup>See IGP Report at 2.

software, and optimize them based on cost and policy objectives.<sup>41</sup> The HECO Companies anticipate that this process will "produce an optimized portfolio of incremental resources and transmission and distribution assets to reliably and affordably operate the grid."<sup>42</sup> At the end of step four, the HECO Companies plan to submit a five-year plan with discrete investments, programs, and pricing proposals to the commission for its review.<sup>43</sup>

The HECO Companies propose to complete the bulk of the planning process in 18 months.<sup>44</sup> The Companies propose an extensive stakeholder engagement framework, including an approximately 20-member Stakeholder Council to provide feedback throughout the process, a technical advisory panel to vet advanced tools and methods, and ad-hoc working groups composed of subject matter experts to assist in key aspects of the IGP process, including developing forecast assumptions, system and customer data solutions, and market-based procurement processes.<sup>45</sup> The HECO Companies propose to conduct an IGP cycle every two years,

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<sup>41</sup>See IGP Report at 2.

<sup>42</sup>IGP Report at 8.

<sup>43</sup>See IGP Report at 2.

<sup>44</sup>See IGP Report at 14.

<sup>45</sup>See IGP Report at 17-18.



with the first cycle beginning in 2019, resulting in the first plan by the end of 2020.<sup>46</sup>

B.

Requested Commission Action

The HECO Companies ask the commission to take three actions to so that they may proceed expeditiously.<sup>47</sup> First, the HECO Companies seek a waiver from the Framework for Competitive Bidding for the IGP process, "for at least this initial cycle, for supply-side resource procurements."<sup>48</sup> Second, the HECO Companies seek to continue ongoing resource procurements and demand response ("DR") and DER programs, and propose that ongoing resource and DER-related programs and efforts, and alignment of the final outcomes from related proceedings, be integrated into the second IGP planning cycle.<sup>49</sup> Third, the HECO Companies seek permission to proceed outside of a formal docketed proceeding "in order to facilitate open communication

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<sup>46</sup>See IGP Report at 15.

<sup>47</sup>See IGP Report at 19-20.

<sup>48</sup>IGP Report at 19.

<sup>49</sup>See IGP Report at 19.

and more collaboration among stakeholders during the planning process."<sup>50</sup>

IV.

DISCUSSION

A.

Legal Authority

Hawaii Revised Statutes ("HRS") § 269-6 states, in relevant part: "**General powers and duties.** (a) The public utilities commission 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."

HRS § 269-7, in turn, states:

**Investigative powers.** (a) The public utilities commission 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,

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<sup>50</sup>IGP Report at 19-20.

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.

Initial Feedback and Guidance

The commission provided guidance on grid planning to the HECO Companies in Docket No. 2017-0226, stating: "[t]he Companies should comprehensively evaluate grid needs to determine optimal timing, location, and sequencing of new investments."<sup>51</sup> The commission further stated that "[t]he integrated grid planning process must enhance the visibility and understanding around distribution planning."<sup>52</sup> The commission stated its expectation that the HECO Companies "remain nimble, and adjust their planning process and grid modernization investments accordingly as programmatic solutions and technical advances emerge from other related proceedings, such as the Market Track of the DER investigation and the DR docket."<sup>53</sup>

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<sup>51</sup>In re Public Util. Comm'n, Docket No. 2017-0226, Order No. 35268, filed on February 7, 2018 ("Order No. 35268"), at 29.

<sup>52</sup>Order No. 35268 at 31.

<sup>53</sup>Order No. 35268 at 36.



The IGP Report responds well to this guidance and the commission is optimistic it will afford the HECO Companies, stakeholders, and the commission the opportunity to realize long-standing goals. The commission supports an integrated planning approach that coordinates and informs planning across all levels of the power system (resource, transmission, and distribution), and that ensures safe, affordable, and reliable service to customers. The holistic approach to system planning described in the IGP Report presents a methodology to develop optimized resource and grid solutions, enable the most cost-effective portfolio to be selected, and facilitate the State's transition to 100 percent renewable energy. Despite these expected benefits, the commission acknowledges that integrating three traditionally separate planning processes will present significant challenges. This is particularly true because, the conventional distribution planning process has largely been conducted internal to the Companies, outside of commission and public view.<sup>54</sup>

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<sup>54</sup>Certain aspects of the HECO Companies' distribution planning efforts, such as the integration capacity analyses included in the PSIPs, have been publicly accessible and the subject of stakeholder discussion in commission proceedings. However, the bulk of the distribution planning function has historically been conducted internally at the Companies.



The commission supports the stated goals of the IGP Report, but recognizes that many critical details are yet unknown. Given the uncertainty inherent in this early stage of a new process, the commission, in conjunction with the Companies and stakeholders, intends to foster a process that is: (1) transparent; (2) inclusive; (3) coordinated with other planned capital investments and commission initiatives; (4) flexible so that it can improve with experience and adapt to new technologies, planning capabilities, and grid conditions; and (5) consistent with State energy policies.

C.

Response to Requested Commission Action

The commission need not address the HECO Companies' request for a waiver from the Framework for Competitive Bidding at this time. The IGP Report does not offer any alternative to the existing Framework for Competitive Bidding. Instead, the IGP Report states the expectation "that the formation of a market working group will address the needed structural changes to streamline the RFP procurement processes, including definition of unbundled grid services and standardization of contracting methods and agreements."<sup>55</sup> The commission expects that this working group

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<sup>55</sup>IGP Report at 19.

process will afford the HECO Companies, the commission, and stakeholders an opportunity to learn more about these potential structural changes. Thus, the commission will not rule on the request for a waiver from the Framework for Competitive Bidding at this time.

Regarding the HECO Companies' second request - to continue ongoing resource procurements and DR/DER programs - the HECO Companies do not need further commission authorization to do so. The filing of the IGP Report does not interrupt or alter standing commission directives that provide the HECO Companies the necessary authority to continue these initiatives. Indeed, the commission expects the HECO Companies to continue their efforts to execute existing resource procurements and that DR/DER programs will continue to ensure that needs identified in the PSIPs are met. The commission recognizes and appreciates the potential overlap between the IGP and ongoing proceedings and policy efforts, but agrees with the Companies that the harmonization and alignment of ongoing resource and DER-related programs and efforts, as well as the final outcomes from related proceedings, should be addressed at a later time.<sup>56</sup>

The commission denies the HECO Companies' request to proceed with IGP outside of a formal docketed proceeding.

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<sup>56</sup>See IGP Report at 19.

The commission appreciates the spirit of the HECO Companies' request and agrees that "it is essential that the community be engaged in a range of open, productive discussions to address the changes needed[,] and that "we will all learn in this first IGP cycle and have the opportunity to improve going forward."<sup>57</sup> Oversight through a docketed commission proceeding will not prevent the HECO Companies from accomplishing their stakeholder engagement objectives. The commission expects the HECO Companies to take a leadership role throughout the IGP process. The commission intends to ensure that the process is conducted in a timely, transparent, and collaborative manner, by providing guidance and directives where necessary and appropriate.

The commission joins the HECO Companies in acknowledging the challenges ahead, which include identifying, sourcing, and procuring solutions within the framework of this novel, complex planning process on an ambitious timeline. The commission will actively support the IGP process, lend its authority and resources to developing the plan, and promote its success through other directives as circumstances may warrant.

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<sup>57</sup>IGP Report at 20.



D.

IRP Framework Requirements

The commission reaffirms the suspension of the IRP Framework requirements for the HECO Companies.<sup>58</sup> At this time, the commission does not intend to order the HECO Companies to begin a new IRP cycle. The commission is encouraged by the process proposed in the IGP Report, which builds upon efforts in the PSIPs and elsewhere to more fully integrate planning functions and reduce costs to customers, consistent with prior commission guidance.<sup>59</sup> This evolution of traditional resource planning is necessary in light of the substantial changes underway in the electricity industry.

After completing the initial steps in this docket discussed below, including review of public comments and the forthcoming IGP Workplan, the commission will consider whether the proposed IGP process should replace the IRP Framework.

E.

Next Steps

As detailed below, the commission will begin this investigation, pursuant to HRS §§ 269-6 and 269-7, with three

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<sup>58</sup>See Order 32052 at 80.

<sup>59</sup>See Order 34696 at 48-49.

initial steps: (1) stakeholder engagement; (2) public comments; and (3) the submission of an IGP Workplan.

1.

### Stakeholder Engagement

The HECO Companies have proposed to "launch the formal stakeholder engagement and continue [] customer education and engagement to seek input."<sup>60</sup> Some parts of this process have already begun. The commission underscores the importance of meaningful stakeholder engagement and supports the ongoing outreach efforts described in Section 2.3 of the IGP Report - including the proposed IGP-related public and stakeholder engagement, the Stakeholder Council, the Technical Advisory Panel, the Forecast Working Group, the Market Working Group, and other working groups as needed. To the extent they have not already begun, the commission authorizes the HECO Companies to begin implementing these stakeholder engagement steps. The commission encourages the HECO Companies to incorporate stakeholder feedback into the ongoing planning process. Stakeholder engagement will be critical to the success of the IGP process and the commission expects the Companies' proposed

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<sup>60</sup>IGP Report at 20.

customer and stakeholder process will support and improve the resulting plans.

While the HECO Companies advance the pre-planning activities outlined in Section 2.3, the commission will focus on clarifying the proposed planning process. Therefore, in addition to the stakeholder processes described above, consistent with the customer and public engagement strategy in the IGP Report,<sup>61</sup> the commission directs the HECO Companies to convene a workshop, which is open to interested stakeholders and the public, to present the details of the IGP Report and answer questions. The Companies should use this workshop to introduce the IGP process to stakeholders, explain how each critical step would unfold, and detail how the process will achieve its goals. This workshop shall take place no later than October 1, 2018.<sup>62</sup>

## 2.

### Public Comments

The commission seeks written comments on the IGP Report and therefore establishes a comment period so that any interested party may provide the commission feedback on the IGP Report.

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<sup>61</sup>See IGP Report at 18.

<sup>62</sup>The first meeting of the Stakeholder Council may satisfy this requirement, provided that it is made open to the public.



Interested parties may review the IGP Report on the HECO Companies' website<sup>63</sup> or through the commission's Document Management System (<https://dms.puc.hawaii.gov/dms/>), Docket Quick Link: 2018-0165.

Comments should be addressed to the attention of the commission and clearly state that they are being filed in Docket No. 2018-0165 to address the Companies' Integrated Grid Planning Report. Comments may be filed with the commission by October 15, 2018.<sup>64</sup> Comments may be submitted as follows:

By email: [Hawaii.PUC@hawaii.gov](mailto:Hawaii.PUC@hawaii.gov)<sup>65</sup>

By hand-delivery or by first class mail:

Public Utilities Commission, State of Hawaii  
465 South King Street, Room No. 103<sup>66</sup>  
Honolulu, Hawaii 96813

E-filing: See <http://puc.hawaii.gov/filing/efiling/> for e-filing instructions.

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<sup>63</sup>See n.1, supra.

<sup>64</sup>With respect to public comments, the commission is not requiring the submission of hard copies of documents that are submitted electronically.

<sup>65</sup>Comments submitted via email should include the following in the subject line: "Docket No. 2018-0165 - IGP Report - [Filer Name]."

<sup>66</sup>At this time, comments may be hand-delivered to Office B-1, rather than Room No. 103, due to ongoing construction at the commission's office.

IGP Workplan

The commission directs the HECO Companies to develop an IGP Workplan to build upon and supplement the IGP Report. The IGP Report broadly outlines the proposed IGP process, without providing significant details about the activities, timelines, and outcomes for the major components of the IGP process.

The commission appreciates that this is an inherent aspect of the early stages of a new planning process and acknowledges that the details will develop during this proceeding as the HECO Companies incorporate critical input from stakeholders and customers, and receive further guidance from the commission. As such, the HECO Companies must incorporate such feedback into an IGP Workplan that further explains the major steps or components of the IGP process, including proposed objectives, timelines, and milestones for each step.

At a minimum, the IGP Workplan must include additional detail and description of the following: (1) the proposed Working Groups, including their specific objectives, composition, expected deliverables, and timelines for those deliverables; (2) a specific proposal for how forecasting assumptions, system data, modeling inputs, studies, analyses, meeting summaries, and other data will be shared with

the commission and stakeholders throughout the IGP process; (3) the process and timeline for defining and quantifying grid needs (including generation, transmission, and distribution); (4) the process and timeline for sourcing and procuring solutions to meet identified grid needs; (5) the process and timeline for analysis for optimization of the grid solutions identified in the procurement phase; (6) opportunities for midstream evaluation and potential course correction for the IGP process; and (7) when and how independent facilitation will assist the IGP process. By December 14, 2018, the Companies shall submit the IGP Workplan to the commission in this docket. The IGP Workplan should respond to and incorporate the feedback received from stakeholders during the Companies' engagement efforts and from written comments filed in this docket.

As described above, the IGP Workplan must provide a more comprehensive description of timing and scope of major activities that will occur in the actual planning processes in the following year. After the IGP Workplan is filed, the commission will issue an Order providing guidance for the Companies and setting the next procedural steps for this docket.



V.

PROCEDURAL MATTERS

A.

Named Parties

The commission names HECO, MECO, and HELCO individually as Parties to this proceeding. In addition, the commission names the Department of Commerce and Consumer Affairs, Division of Consumer Advocacy ("Consumer Advocate") a Party to this proceeding.<sup>67</sup>

B.

Motions to Intervene or Participate

Any interested individual, entity, agency, or community or business organization may file a motion to intervene or to participate without intervention in this docket. The commission advises that the investigation to be conducted in this docket will require detailed analysis and discussion of various technical, economic, and policy issues concerning IGP. Potential intervenors or participants must be prepared to address these issues in depth

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<sup>67</sup>The Consumer Advocate is statutorily mandated to represent, protect, and advance the interests of all consumers of utility service and is an ex officio party to any proceeding before the commission. See HRS § 269-51 and Hawaii Administrative Rules ("HAR") § 6-61-62.

and to meaningfully participate in the discussion and resolution of same.

As such, in this proceeding, potential intervenors and participants are required to present detailed information in their motions, which demonstrate either that they possess expertise with respect to planning issues, or that they will retain consultants that have such expertise. Thus, potential intervenors should demonstrate engineering, economic, and policy expertise commensurate with the highly complex and technical nature of these interrelated issues. This requirement is necessary so that the issues in this proceeding can be addressed in both a comprehensive and timely fashion.

A motion to intervene or participate without intervention must be filed not later than twenty days from the date of this Order, pursuant to HAR § 6-61-57(3)(B). Motions to intervene or participate without intervention must comply with HAR Chapter 6-61, Rules of Practice and Procedure Before the Public Utilities Commission. Intervenors and participants will not be allowed to broaden the issues or to unduly delay the proceeding.

After the commission has ruled on intervention, the commission will develop a set of proposed issues and a procedural schedule for the docket.

VI.

ORDERS

THE COMMISSION ORDERS:

1. Pursuant to HRS §§ 269-6 and 269-7, this proceeding is instituted to investigate integrated grid planning as it relates to HECO, HELCO, and MECO.

2. HECO, HELCO, and MECO, and the Consumer Advocate are named as Parties to this docket.

3. The HECO Companies shall file the Integrated Grid Planning Report in this docket.

4. The HECO Companies shall continue implementing the stakeholder engagement and working groups described in Section 2.3 of the Integrated Grid Planning Report.

5. The HECO Companies shall convene a workshop as described in Section IV.E.1., above, no later than October 1, 2018.

6. Public comments on the Integrated Grid Planning Report shall be filed in this docket by October 15, 2018.

7. On or before December 14, 2018, the HECO Companies shall file their IGP Workplan in this docket, as described in Section IV.E.3., above.

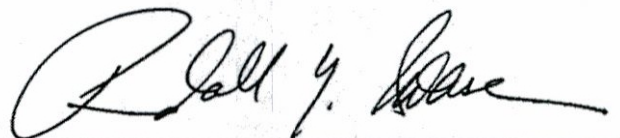
8. Any motion to intervene or participate in this proceeding must be filed not later than twenty days from the date of this Order, pursuant to HAR § 6-61-57(3)(B). All motions to intervene or participate without intervention must comply

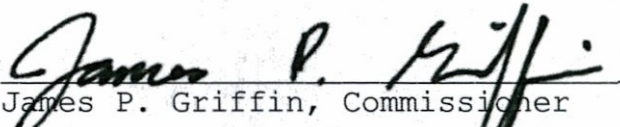


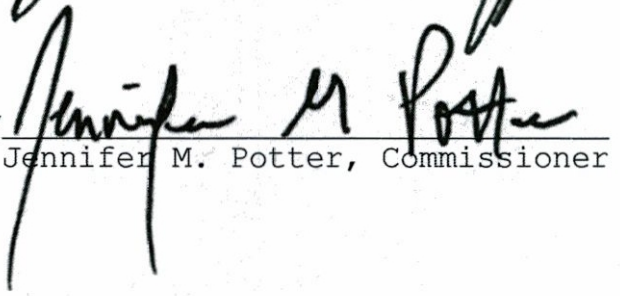
with HAR Chapter 6-61, Rules of Practice and Procedure Before the  
Public Utilities Commission.

DONE at Honolulu, Hawaii JUL 12 2018.


PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

By   
Randall Y. Iwase, Chair

By   
James P. Griffin, Commissioner

By   
Jennifer M. Potter, Commissioner

APPROVED AS TO FORM:

  
Mike S. Wallerstein  
Commission Counsel

2018-0165.ljk

CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:<sup>68</sup>

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<sup>68</sup>The commission is providing courtesy copies of this Order to parties to Docket Nos. 2014-0183, 2014-0192, 2015-0412, and 2016-0087. Subsequent orders in this docket will be provided only to the parties to this Docket.

Certificate of Service

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