Hawaiian Electric Companies
Integrated Grid Planning Stakeholder Council Meeting
August 23, 2019, 8:30am – 12:30pm
American Savings Bank Building, Training Room 2

Meeting Agenda
❖ Welcome and Order of the Day
❖ HAVEN Overview and Soft Launch Description Overview
❖ Groups split between HAVEN and Soft Launch
❖ Announcements and Break
❖ Introduction of Presentation Topic
❖ TOPIC PRESENTATION: Updated Resource Plans
❖ Q&A; Discussion
❖ Break
❖ Summary of July 31, 2019 IGP Filing
❖ Q&A; Discussion
❖ Next Steps and Final Announcements

I. STATUS UPDATE
   A. Stakeholder Council: updated list of IGPSC members, including those present at the meeting (in-person or via WebEx) denoted with an asterisk:

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>HPUC</td>
<td>Dave Parsons*</td>
<td>Chief of Policy &amp; Research</td>
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<tr>
<td>Consumer Advocate</td>
<td>Dean Nishina*</td>
<td>Executive Director, Division of Consumer Advocacy</td>
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<tr>
<td>DBEDT</td>
<td>Carilyn Shon*</td>
<td>Hawai‘i State Energy Office, Energy Administrator</td>
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<td>Office of State Planning</td>
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<td>Office of Planning</td>
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<td>DOD</td>
<td>Keith Yamanaka</td>
<td>USAG-HI, Directorate of Public Works</td>
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<tr>
<td>Large CI&amp;I Customer</td>
<td>Barry Usagawa*</td>
<td>Board of Water Supply</td>
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<tr>
<td>Community Delegate (Hawaii)</td>
<td>Jacqui Hoover</td>
<td>President of Hawai‘i Leeward Planning Conference and Executive Director &amp; COO of Hawai‘i Island Economic Development Board (HIEDB)</td>
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<td>Community Delegate (Maui)</td>
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<td>Community Delegate (Moloka‘i)</td>
<td>Barbara Haliniak</td>
<td>Owner, The Business Depot, Inc., and President, Moloka‘i Island Foundation</td>
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<td>Community Delegate (Lana‘i)</td>
<td>Alberta DeJetley</td>
<td>Publisher and Editor of Lana‘i Today, Owner, Albert’s Farm, member of Lana‘i Chamber of Commerce</td>
</tr>
<tr>
<td>Community Delegate (O‘ahu)</td>
<td>Pono Shim*</td>
<td>President &amp; CEO at O‘ahu Economic Development Board</td>
</tr>
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Local Gov’t (Hawaii)  
Local Gov’t (Maui)  Alex de Roode  County of Maui Energy Commissioner  
Local Gov’t (O’ahu)  Robert “Rocky” Mould*  County of Honolulu, Energy Program Manager, Office of Climate Change, Sustainability and Resiliency  
Sustainability Advocate (Local)  Murray Clay  Ulupono Initiative  
Sustainability Advocate (National)  Merrian Borgeson  Natural Resources Defense Council (NRDC)  
Small Solar & Storage  Chris Debone  DERC  
Demand Response  Yvette Maskrey  Honeywell  
Energy Efficiency  Brian Kealoha*  Hawaii Energy  
Electric Vehicles  Melissa Miyashiro  Blue Planet  
Environmental Advocate  Henry Curtis*  Life of the Land  
IPP (utility-scale resource)  Gerald Sumida*  Carlsmith Ball LLP  
Chair of TAP  Rick Rocheleau*  Hawaiʻi Natural Energy Institute (HNEI)  

II. SOFT LAUNCH: Marc Asano, Director, Transmission, Distribution and Interconnection Planning discussed the purpose of the Soft Launch. In summary, Hawaiian Electric is looking to adjust the scope of the Soft Launch to include the distribution-level needs in East Kapolei and Ho‘opili. The utility is looking for NWA (non-wires alternatives) solutions to serve the identified circuit needs in the area and would like to test the market for shorter- and longer-term solutions. The goal is to issue a draft RFP on September 3, 2019, with the objective of gathering stakeholder feedback to shape what is needed for the final RFP.

The discussion was focused on the key topics noted below:

A. Ho‘opili: The biggest challenge with Ho‘opili is that it is still being built - the full scope of the needs may change over time. The capacity need for Ho‘opili is much greater than that of East Kapolei.

B. Resiliency in the future: Some questions were focused on feasibility of microgrids as an option. In the Soft Launch, a combination of technologies may be evaluated to manage the loads from in the Kapolei/ Ho‘opili area. If a microgrid is proposed as a potential NWA solution, it would also undergo evaluation.

C. Deferral of grid needs with NWAs

III. HAVEN: Hawai‘i Advanced Visualization Energy Nexus is an interactive 3-dimensional map of the islands displaying the Hawaiian Electric Companies’ 2016 Power Supply Improvement
Plans (PSIP) illustrating the pathways to achieving the 100% renewable portfolio standards by 2045. It incorporates large amounts of data collected from the State Energy Office, National Renewable Energy Laboratory (NREL), and Hawaiian Electric Planning Departments, into a functional visualization tool that allows users to customize the presentation of the data. There are currently maps for O‘ahu, Hawai‘i Island and Maui. HAVEN is a collaboration between The Department of Business, Economic Development, and Tourism (DBEDT), Hawaiian Electric Companies and the University of Hawai‘i Laboratory for Advanced Visualization and Applications (LAVA). The technology can be used to provide similar visualizations for Integrated Grid Planning (IGP) plans.

IV. TOPIC PRESENTATION: Updated Resource Plans. The Companies have updated the 2016 PSIP Resource Plans by island to reflect the selected projects from the Stage 1 RFP, the latest capacity and energy targets from the Stage 2 RFP, and other changes.

A. Offshore Wind: There was some discussion about why the resource plan shows offshore wind, including capacity for a 200MW facility. The Companies responded that this PSIP target serves as a proxy. There is no exact timeline regarding an RFP for offshore wind. The current Stage 2 RFP considers the procurements of onshore projects.

V. STAKEHOLDER SURVEY UTILIZING POP IN (online tool) to stimulate discussion on future actions Hawaiian Electric should take if it exceeds its RPS goals for 2030 and 2040.

A. Summary:
   a. Accelerating RPS achievement to further reduce greenhouse gas (GHG) emissions had the support of nearly half of survey participants. The idea of pausing to assess and gain operational experience with the newly acquired data came in second but triggered considerable discussion.
   b. Many stakeholders felt that stopping or pausing was not the right word, or right action, in this case. Suggestion that while there may be a pause in the process, other aspects of the project can still move forward towards the goals.
   c. Enabling technologies may be more affordable in the future, so it is vital to continuously reassess accelerating goals based on reliability impact, operational and technology costs.

B. Stakeholder feedback:
   a. Considering equity, which could mean a slower, more thoughtful approach to distributed energy resources (DER) deployment. Optimizing DER deployment for resilience. Keeping the process adaptable, including climate and near-term impact in consideration. Looking at lifecycle costs when addressing similarly to GHG lifecycles. GHG is important, but fossil fuels are where the focus should be.
   b. Requesting for summary reports from all working groups to help Stakeholder Council members to understand what the other efforts are doing.
      i. Companies have posted all meeting presentations and summary notes to the IGP website: https://www.hawaiianelectric.com/clean-energy-hawaii/integrated-grid-planning

VI. SUMMARY OF JULY 31, 2019, IGP FILING to provide an overview of the recent IGP Review Points filing. In summary, the filing proposed that feedback and potential course-correction found in the IGP process would be discussed in the Stakeholder Council and Working Group meetings. The companies will file summaries of what was developed in the working groups to the docket. An independent observer is not needed, as the IGP process is transparent and iterative, and Commission oversight is provided within the stakeholder and working group meetings.
A. TIMELINE DISCUSSION

1. The intent for the IGP planning cycle in 2020 is to use the final award group from the Stage 2 RFP procurement as the basis to begin identifying and planning for future system needs and procurements.

B. PARTICIPANTS’ FEEDBACK

1. Stakeholders felt the 30-day window for review and comment of the Review Point summaries may be too short. The input from technical advisors is of value to stakeholders along the way as it provides more details throughout the process and would make it easier for people to react to the new information, with better understanding, within the given timeframe.

2. Stakeholders looking for a better way to ensure their feedback is received and reported accordingly. It was suggested that there be an opportunity to raise questions and concerns be prior to the Stakeholder Council meetings so the discussions may be focused on the topics of interest.
   a. Questions and comments may be provided through email at IGP@hawaiianelectric.com.

3. There is a desire to know what the other working groups are discussing and what information they may need from the Stakeholder Council. Members also requested that stakeholders be informed in advance what the meeting objective is and what types of feedback is needed.

VII. NEXT STEPS

- Next IGP Stakeholder Council meeting scheduled for November 7, 2019
- IGP Stakeholder Council members may direct questions to IGP@hawaiianelectric.com or reach out directly to Colton Ching (Senior Vice President, Planning and Technology).