Hawaiian Electric Companies
Integrated Grid Plan Stakeholder Council (IGPSC) Meeting
June 1, 2020 (via WebEx)

AGENDA

- Welcome
- Review Point Letter and Filing
- Stage 2 Final Award Group Summary
- Proposed Services for IGP
- Looking Ahead

I. STATUS UPDATE

A. Stakeholder Council: updated list of Integrated Grid Plan Stakeholder Council (IGPSC) members, including those present at the meeting, 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>
</tr>
<tr>
<td>Consumer Advocate</td>
<td>Dean Nishina*</td>
<td>Division of Consumer Advocacy</td>
</tr>
<tr>
<td>DBEDT</td>
<td>Scott Glenn*</td>
<td>Hawai‘i State Energy Office, Energy Administrator</td>
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<tr>
<td>DOD</td>
<td>Keith Yamanaka</td>
<td>USAG-HI, Directorate of Public Works</td>
</tr>
<tr>
<td>Large CI&amp;I Customer</td>
<td>Barry Usagawa*</td>
<td>Board of Water Supply</td>
</tr>
<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>
</tr>
<tr>
<td>Community Delegate (O‘ahu)</td>
<td>Pono Shim</td>
<td>President &amp; CEO at O‘ahu Economic Development Board</td>
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<tr>
<td>Local Gov’t (Maui)</td>
<td>Alex de Roode*</td>
<td>County of Maui Energy Commissioner</td>
</tr>
<tr>
<td>Local Gov’t (O‘ahu)</td>
<td>Robert “Rocky” Mould</td>
<td>County of Honolulu, Energy Program Manager, Office of Climate Change, Sustainability and Resiliency</td>
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<tr>
<td>Sustainability Advocate (Local)</td>
<td>Murray Clay*</td>
<td>Ulupono Initiative</td>
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B. Additional Attendees- members of the public and represented entities also involved in the IGP, including those present at the meeting, denoted by asterisk.

<table>
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<tr>
<td>Paul De Martini*</td>
<td>Newport Consulting Group</td>
</tr>
<tr>
<td>Derek Stenclik*</td>
<td>Telos Energy</td>
</tr>
<tr>
<td>Wren Wescoatt*</td>
<td>Progression HI Offshore Wind/Progression Energy</td>
</tr>
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C. March 12, 2020 Meeting Recap:

1. Review of topics discussed:
   - Review Forecasts and Other Assumptions
   - Modeling Sensitivities (SEOWG)
   - Public Meeting Recap (O‘ahu, Maui, Hawai‘i Island)

II. Review Point Letter and Filing

A. Review Point Letter- A letter was filed on May 27, 2020 in response to the commission’s November guidance and served as a public update for the PUC on HECO’s workplan and schedule. Slides include the revised schedule and workplan, progress made on working group deliverables, and interdependencies with other dockets.  
Reference Presentation slides from June 1, 2020, beginning at page 6

1. Revised Schedule and Workplan: Plan to file Review Point 1 in near future (next two weeks), which will include forecast and input assumptions as a result of the Forecast Assumptions Working Group (FAWG)
a. Impacts to the company because of Covid-19 resulting in re-prioritization of resources and work
   (1) Covid-19 impacts to forecasts will be shared once available
b. Addition of June/July 2020 meeting to review NREL Resource Potential update, complete review of Solution Evaluations Working Group

2. CBRE Procurements and New DER Programs - Viewed as two initiatives setting the resources and services that would be procured in the near term. The plan is to run our resource planning models to identify needed grid services and help provide information for CBRE RFP to better inform potential bidders.
   a. Use methodologies and modeling advancements developed in the Solution Evaluation & Optimization Working Group to inform CBRE, DER docket
   b. Identify and quantify grid services to immediately apply concepts developed by the working group
   c. Per Commission’s order, HECO to incorporate NWA opportunities into the CBRE procurement process
   d. Presents opportunity for Technical Advisory Panel (TAP) and Stakeholder Council to better understand concepts proposed in IGP through working examples in CBRE procurement and DER docket
   e. Adjustments can be made prior to December 2020 before beginning additional long-term needs assessments and procurement
      (1) Long-term may be 10+ years from today
      (2) Signals to market that HECO is interested and open to other technology and resources

B. Working Group Deliverables
   1. Completed
      a. GSPA Standardized Contract
      b. Soft Launch RFP: Independent Observer final report to be submitted with Review Point 1
   2. On Schedule
      a. Resilience WG Report
      b. 2020 System Forecast, Input Assumptions
      c. Distribution Planning Methodology: On website today/tomorrow (6/1/2020 or 6/2/2020)
      d. NWA Opportunity Evaluation: On website today/tomorrow (6/1/2020 or 6/2/2020)
      e. Competitive Bid Framework Revisions
   3. Slightly behind schedule: SEOWG Deliverable
   4. Delayed: NREL Resource Potential Study Update

C. Technical Advisory Panel (TAP) Changes
   1. Role of TAP: Working with HNEI to position TAP to take on the role of independent evaluator for the technical work that HECO must execute for IGP
a. Members will be assigned to specific working groups and tasked with sending feedback on review point filings
b. Will add members to the panel to fill in gaps for areas of expertise and bandwidth, as well as availability
c. Group size will remain manageable
d. Copy of first Review Point filing will go to TAP for review

2. **TAP Member Engagement**: HNEI leading TAP to bring new members up to speed and to take up more specific issues to be resolved or reviewed. Meeting summaries to be presented to Stakeholder Council on a more regular basis.
   a. Goal is to get members engaged earlier
   b. Identify and resolve issues with the models and modeling process ahead of when they're utilized

3. **HNEI Role**: HNEI is working independently without any compensation or contract from HECO.

### III. Stage Two Final Award Group Summary:

Final award group selected May 8, 2020. Nine (9) projects on O’ahu, four (4) on Maui, three (3) on Hawai’i Island. More than 75 bids received in all. To ensure competition in further procurement, number of bids for each island will not be disclosed.

*Reference Presentation slides from June 1, 2020, beginning at page 16*

#### A. O’ahu projects
1. Unable to get full 1300 GWh, but did award 683 GWh of renewable energy
2. Single standalone storage project and eight (8) PV plus storage projects

#### B. Maui projects
1. Procured in excess of the 295GWh target
2. Three (3) PV plus storage projects and one (1) standalone storage project

#### C. Hawai’i Island projects
1. Looked at various scenarios and taking PGV and Hu Honua availability (or lack of) into consideration
2. 342 GWh renewable energy awarded to two (2) PV plus storage projects and 1 standalone contingency storage project

#### D. What’s Next- Good path forward to integrate and accelerate near term plans between now and 2030 to reach RPS goals.
1. Project applications still need PUC approval. The only confidential information will be pricing.
2. Hoping to file applications in the fall. Majority of projects take 3-4 months for approval after filing.
3. All projects require community meetings to collect and compile comments to be submitted with the application. Anticipate meetings will be held virtually. Developers in the process of sending out invitations.
4. Plan is to have one consolidated website with links to developers. Will look into adding meeting dates as they are scheduled.
(i) HECO website to feature Stage 2 Project information and links to each individual developer’s websites (updated on 6/2/20):
(ii) State Energy office webpage dedicated to Stage Two project tracking
energy.hawaii.gov/Hawaiian-electric-phase2

IV. Proposed Grid Services for IGP: Used to inform grid needs assessments and ultimately inform what future procurement programs will look like
Reference Presentation slides from June 1, 2020, beginning at page 18

A. Two models in resource planning-RESOLVE & PLEXOS-being used at different parts of the process to effectively evaluate grid needs

B. In reference to transmission and distribution needs, Inertia and Fast Frequency Response (FFR) being continued from Stage 2 RFPs

D. Still working out how to show deferral of Transmission and Distribution investments.
   1. Modeling RPS compliance with state mandates
   2. Plan to incorporate some information from NREL resource potential report to identify areas where projects can be developed that may provide deferral capacity.

E. Grid Service Capability by Technology (Based on TAP feedback)
   1. References technologies that may or may not be able to provide a particular service. Color based on capabilities and requirements.
   2. As the Company gets more storage on the system, it will examine the possibility that the maximum disconnection/point of failure numbers could change. Will need to review during the update to system security analysis.

V. Next Steps

A. Next meeting planned for June/July 2020 – will send doodle poll to determine best date and time option. Meeting will include:
   1. Review NREL Resource Potential Update
   2. Complete review of SEOWG deliverable

B. Slides from today’s meeting and Summary Notes will be provided shortly after this meeting.

C. IGPSC members can direct questions and feedback to IGP@hawaiianelectric.com