



Hawaiian Electric
Maui Electric
Hawai'i Electric Light

Hawaiian Electric Companies Stakeholder Council Meeting: IGP Draft Workplan Walkthrough

November 8, 2018
Ala Moana Hotel

Participants

IGPSC members present at the meeting:

- Leo Asuncion – Office of Planning
- John Cole – Hawaii Natural Energy Institute
- Henry Curtis – Life of the Land
- Kyle Datta – Ulupono Initiative
- Alex de Roode – Maui County BWS
- Alberta DeJetley – Lanai Today
- Barbara Haliniak – The Business Depot, Inc.
- Jacqui Hoover – Hawaii Island Economic Development Board
- Yvette Maskrey – Honeywell
- Rocky Mould – C&C Honolulu
- Dave Parsons – HPUC, Chief of Policy & Research
- Fred Redell – Maui County Energy Commissioner
- Carilyn Shon – Hawaii State Energy Office
- Barry Usagawa – Board of Water Supply
- Ron Whitmore – Hawaii County
- Keith Yamanaka – USAG-HI

Invited IGPSC members represented on the WebEx:

- Merrian Borgeson – Natural Resources Defense Council

IGPSC members not in attendance:

- Brian Kealoha – Hawaii Energy
- Melissa Miyashiro- Blue Planet
- Dean Nishina – Division of Consumer Advocacy
- Rick Rocheleau – Hawaii Natural Energy Institute
- Pono Shim – Oahu Economic Development Board
- Gerald Sumida – Carlsmith Ball LLP

Agenda

| Time | Topic | Presenter/Facilitator |
|---------------|---|--|
| 8:30 – 8:45 | Welcome | Donalyn Dela Cruz, S360 |
| 9:30 – 9:15 | Overview and Stakeholder Feedback | |
| 9:15 – 10:15 | IGP Draft Workplan Review <ul style="list-style-type: none"> • IGP Process • Forecast Assumptions, Action Items • System Needs: Defining & Quantifying • Distribution Planning Working Group • Sourcing Solutions • Solution Evaluation & Optimization • Market Working Group • MWG: Standardized Contract • MWG: Grid Services • MWG: Competitive Procurement • IGP Soft Launch • Stakeholder Engagement | Lisa Giang Joanne Ide Christopher Lau Marc Asano M. Asano Richard Barone, Greg Shimokawa L. Giang R. Barone C. Lau G. Shimokawa M. Asano L. Giang |
| 11:45 – 12:00 | Next Steps: Closing | D. Dela Cruz |

Key Discussion Points

- **Integrated Grid Planning (IGP) Process-** Rather than having a generation portfolio separate from the transmission and distribution system, the IGP intends to bring all of these processes together. The IGP is an engagement and planning effort and ultimately a procurement effort to cover and encompass generation, transmission, and distribution. Issues around microgrids and DER resources and topics such as resiliency and achieving certain renewable levels and fossil fuel and greenhouse gas reductions will be part of this one encompassing process. It allows Hawaiian Electric (HE) to have complete and integrated discussions around how each element impacts one another. It allows HE to look at the full value and potential value of any resource option.
- **Transmission & Distribution (T&D)-** Energy efficiencies, including T&D, where such technologies are located and which technologies are used, were identified as important parameters and it was noted that T&D losses, generation efficiencies and auxiliary

losses are components of energy efficiency portfolio standards. All contribute towards the 4300-gigawatt hour Energy Efficiency Portfolio Standard (EEPS) goal.

- **Costs**

- In forecasting assumptions, HE will be using an assumed resource cost in their analyses to identify the resource needs. After going through the procurement process and solution sourcing, the project cost will be identified, which will be based on what others present as potential solutions.
- When HE evaluates options and ultimately makes a selection, it needs to include the fixed and variable demand in energy components of costs and ultimately the utility bills. It was suggested that HE look at commercial and residential customers as well as look at the fixed variable and energy demand use to communicate and evaluate. There was a suggestion that a working group should be formed to review this issue.

- **Land Request for Information (RFI)-**

- In responding to a land RFI, a developer will need information on customers' needs and forecasts. HE will provide interested developers with information that includes, among other things, resource needs (e.g. the amount of megawatt hours). The intent is not to be prescriptive in what developers have to do, but rather lay out expectations of what is needed and allow developers to decide how best to meet those needs.
- A comment was made that the land RFI process should also be informed by customer need and policy goals so when you are selecting a property on which to develop, one would have resiliency consideration and environmental impact considerations to determine if the land is meeting the criteria. The land RFI is intended to provide as much information as possible so a land owner and a project bidder see the benefit to partnering. The land RFI isn't intended to select the land site to develop a project or to drive the uses of certain parcels of land. HE wants to leave it up to the market, so developers can use what works for them and what meets the needs of the utility. It will allow a landowner and developer to connect, so the market gets more diversity and more options and ultimately a greater number of proposals.

- **Environmental Review of Property-** It was discussed whether a project should undergo an environmental review prior to being considered by the utility as a viable project. The decision to increase certainty by vetting and identifying a specific location and its requirements first must be weighed against an opportunity that HE may be foregoing on a site that a utility might not have otherwise thought about. It is a topic that warrants further consideration by the SC.

- **Expertise-** The planning and IGP process will largely be performed in-house, but will utilize consultants with specific expertise, when necessary. Any consultants used would be supplementing HE staff and not performing independent analyses.

- **Environmental Assessment-** EA won't be part of the IGP process. If a project is selected as part of the IGP, then EA will be conducted in executing the project.
- **Customer Load Studies-** There are ongoing studies that HE is conducting, including some that have been done on particular customers. HE will use information from available studies before completing final forecasting assumptions.
- **Technical Advisory Panel-** Comment that the TAP needs to look at protection for large customers. If building a microgrid with HECO, need to know those costs are protected. Need assurances that road taken through this IGP process protects the developer and the customer.
- **Working Groups-** Working groups should represent a good cross-section of the community, so HE will not be surprised by any person or group later in the process. The following working groups and subgroups are being convened:
 - **Working Groups-**
 - Forecast Assumptions Working Group (FAWG)
 - Distribution Planning Working Group (DPWG)
 - Market Working Group (MWG)
 - **MWG Subgroups-**
 - Standardizing Contracts
 - Grid Services
 - Evaluation Optimization
 - Competitive Procurement Process
 - **Distribution Planning Working Group-** It was noted that this is the first-time doing distribution planning within broader resource planning so a working group is being proposed. Many things still need to be developed with stakeholders. There are processes around for long-term resource planning that are well established. Because there are already a number of working groups, HE is trying to balance the needs and the membership for working groups and don't want to get into a trap of only having discussion in specific silos of topics versus coordinating and having an integrated discussion.
- **Value of Service (VoS) Methodology-** Utilization of the VoS methodology and its use for distribution planning will be discussed by the MWG. The evaluation will be developed by the MWG not only at resource level but at the distribution level as well. There may be solutions at the distribution level that can provide some value but HE may have to combine more than one proposal to solve the total distribution need.
- **Reducing Carbon Emissions-** HE will look at, among many parameters, the projected carbon emissions from different resource options and portfolios that it evaluates from a regulatory/statutory perspective. The hard and fast, black and white requirements are going to be established by greenhouse gas and RPS, which are direct translations of carbon and will set the minimums by which HE has to have any plan considered at a minimum.

- **Identification of Needs and Solutions-** The IGP is intended to leverage market prices and solutions to determine if something is cost effective or not. The level of detail to be provided to the developers still needs to be worked out in the MWG.
- **Access to Information-** The IGP process is intended to be public. Materials and products of all the working groups and the IGP process will be made public. HE intends to be mindful in its discussions within and amongst working groups with what can be shared because of market competitiveness.
- **Resiliency-**
 - Policy of resiliency will be taken into account in the IGP. One of the biggest exposures is resiliency. The SC and WGs are encouraged to share suggestions on how they would factor resiliency into the IGP. HE is trying to figure out how best to incorporate resilience into utility planning. Puerto Rico may serve as an example, as it is one of the first to combine long-range planning with resilience as one of its key objectives.
 - HE's responsibility is focused around electric infrastructure. But resiliency is an issue that knows no boundaries. It's all interdependent, so HE is looking at how to address resiliency beyond electric service. It's working with other utilities to look at how to work with other services. It also needs to be responsive to what customers and communities say is needed for resilience. Even communities on the same island may have different resilience needs. The IGP is just one part of resilience. Resiliency measures need to go across infrastructure owners, across first responders, and be responsive to different communities' needs.
- **Soft Launch (Ho'opili)-**
 - Initial plan is to use existing substation to service the new load. The assumption here is that there is sufficient generation to service this area. But at the distribution level, when HE sees a substation getting overloaded and there is no way to service from another substation, then the last option would typically be to build a new substation. But the new IGP process is looking at different ways or some combination of options to ease the equipment overloads.
 - **Community Input-** There will be continuous conversations with customers, communities and developers to walk through options and possibilities to determine what the customers desire and to get customer feedback. HE will find ways to implement IGP process by co-developing ideas through the SC and others, but also want to do by learning. Will try to implement on a smaller scale and take ideas, issues and questions along the way to inform HE moving forward. Determining how to interact with the community is part of the soft launch. While everything may not be figured out, HE has some concepts it wants to test and use results to better inform the IGP process.
- **Agnostic Energy-** Solutions are not predetermined. HE wants to describe what the need is, what the requirements are and allow technology advisors to suggest a solution—to choose the technology that can solve the specific problem.

- **New Substations-** Typically, the utility pays for substations. When new or additional demand arises, there are some portions of work that customers are required to pay for. Need to consider solutions at either the lowest costs, or ones that provide resiliency or upward benefit to the entire island system. Tariffs are in place that dictate who pays for what, but that is going to be in place regardless of what technical solution is found.
- **IGP Impact on Current Projects-** For those projects where the need for those resources is far enough into the future to incorporate into the IGP process, HE will look to include in the soft launch. For those that are nearer term projects, HE will proceed under current processes.

Next Steps

- Additional comments accepted through Nov. 16.
- Next meeting proposed to be February 20, 2019
- SC members can direct questions to IGP@hawaiianelectric.com.