IGP Soft Launch Technical Conference  
Monday, September 9, 2019  
2:00pm – 4:00pm  
American Savings Bank Tower, Training Room 1

Attendees

In-Person
Marc Asano, HE
Christopher Lau, HE
Isaac Kawahara, HE
Greg Shimokawa, HE
Nohea Hirahara, HE
Vladimir Shvets, HE
Amanda Yano, HE
Jonathan Shalfi, Eurus Energy
Isaac Lee, HE
Donna Mizuba, HE
Blaise Arita, HE
Kale Nakata, HE
Amanda-Joy Viramontes, HE
Ken Aramaki, HE
Andre Bisquera, Honeywell
Robert Harris, Sunrun
Gina Yi, PUC
Mike Wallerstein, PUC
Samantha Ruiz, PUC
Jay-Paul Lenker, PUC
Dave Parsons, PUC
Anthony Hong, HE
Gary Fukumoto, HE
Alan Hirayama, HE
Colton Ching, HE
Rebecca Dayhuff-Matsushima, HE
Yoh Kawanami, HE
Jeremy Laundergan, Enernex
Gerald Sumida, Carlsmith Ball
Randal Lui-Kwan, HE
Keith Block, Leidos

WebEx
Brett Choy, Strategic Infrastructure Solutions
Brian Kealoha, Hawaii Energy
Catherine Sullivan, NEC
Clark Crawford, FuelCell Energy
Corinne Chang, HE
Dave Okamura, HE
Dean Nishina, DCA
Dennis Lee, HE
Douglas Staker, Enel X Energy
Emily Erickson, Hawaii Energy Strategists
Enrique Che, HE
Eric Kunisaki, HE
Graham Horn, HE
Jason Prince, HE
Jeremy Kwock, HE
Jim Laehy, OATI
JP Ogata, HE
Kandice Kubojiri, HELCO

Karlie Lund, AES Corporation
Kathy Yonamine, HE
Kayla Kawamata, HE
Kerstan Wong, HE
L JC, HE
Li Yu, Quanta Technology
Lisa Hiraoka, DCA
Marcey Chang, DCA
Marisa Chun, HE
Matt Matsukawa, HE
Melanie Higa, HELCO
Meredith Chee, HE
Michael Lum, HE
Norman Nakagawa, HE
Phil Gerwien, HE
Rene Kamita, DCA
Richard VanDrunen, HE
Riley Ceria, HELCO
Shanelle Aoki, HE
Steven Rymsha, Sunrun
Susan Char, HE

Susan Chow, HE
Tad Glauthier, STEM
Wyatt Sharpley
Objective
- Provide an overview of Soft Launch RFP for open discussion.

Agenda
- Soft Launch Schedule
- East Kapolei Area Needs
- Overview of the RFP
- Overview of the Evaluation
- Q&A/ Discussion/ Feedback

Feedback from the Commission:
The Commission appreciates HECO’s responsiveness and inclusion of Ho’opili as part of the RFP. Commission hopes for a successful RFP. Commission sees this as one of many similar procurements in the future.
- Certain technical specifications need a clearer explanation;
- Certain procedures may need to be described in more detail;
- There is a concern with the lack of an independent observer;
- Considering an independent observer for future NWA procurements may be a good idea;
- Written feedback should be solicited.

Key Takeaways:
I. Soft Launch Schedule
II. East Kapolei Area Needs
III. Overview of the RFP
   a. Two types, GSPA and SSCP A
IV. Overview of the Evaluation
   a. Bucketing the needs by circuit,
      i. Four circuits total –
         1. AA (Ewa Nui 2)
         2. BB (Kaloi 1 + Kaloi 2)
         3. CC (Kaloi 3)
         4. DD (Kamokila 4)
      ii. Three resource buckets total –
          1. Demand-based solutions;
          2. Inverter-based that appear similar to demand-based solutions;
          3. All other inverter-based solutions
   b. Combinations
Q&A/ Discussion/ Feedback

I. Stakeholder: Regarding Appendix J page 10 – can the utility equipment be tailored by size to satisfy the overload needs? Can the wires solution be resized to accommodate smaller sized non-wires solutions?
   a. HECO: The transformers are standard rated at 10 MVA. However, there is some sizing granularity for conductors or cables so there may be some potential there. The bulk of the cost is not the actual wires. For Ho‘opili, it is the cost of building the entire substation. If you look at it in totality (many circuits) there could be a hybrid option where the NWA does not provide 100% of the need but it can reduce the scope of the traditional solution – this is not likely the case for East Kapolei and Ho‘opili.

II. Stakeholder: What about NEM customers?
   a. HECO: Customers on NEM are not part of the proposed solution.

III. Stakeholder: There are other value stacks that may need to be considered from the proposers.

IV. Stakeholder: What solutions would be affected by the 5-minute anti-islanding requirement?
   a. HECO: It depends on where the NWA resources are located, and which need is being solved. The 5-minute reconnection time for anti-islanding is an issue where the inverter-based resource is located on a circuit that is being transferred to another circuit because of an outage. This means the circuit that is picking up the load from the circuit with an outage will experience an overload for at least 5 minutes until the inverters reconnect with the grid.

V. Stakeholder: Is the 5-year contract term flexible? Can it be increased to a 10-year period, which would allow the full use of the lifetime of the equipment?
   a. HECO: If contract term in increased, the NWA portfolio cost must be less than the 10-year deferral value. This includes solving expected continued load growth over the next 10 years.
   b. HECO: Question for stakeholder, if we extend the contract term to 10 years, should we adjust the procurement need to cover the capacity needed over 10 years (i.e., 60 MVA)?
      i. Stakeholder: Are you assuming the deferral value is only 5 years?
   c. Stakeholder: Would you consider evaluating the needs for a longer term?
      i. HECO: The load forecast out to 10 years is uncertain so we may procure services that may not be needed, but we can take that into consideration.
      ii. HECO: What is the term you are looking for?
         1. Stakeholder: 10 years since, for example, a battery life is about 10-years.
      iii. Stakeholder: In your presentation, you mentioned this is an initial evaluation of the needs, would this mean there would be subsequent evaluations or extension of terms for existing contracts?
1. **HECO:** Our contracts do not include automatic extensions or options. We wouldn’t know how the pricing would compare for an existing solution versus a new procurement.

VI. **Stakeholder:** Question about slide 14, Hoʻopili Sensitivities (illustrative) – Do you also consider commercial loads, and if so, what is the assumed load per square-foot?

a. **HECO:** For Hoʻopili, the assumption for commercial loads is 4.5W/ sq. ft.

b. **Stakeholder:** Would the load change over time?
   
   i. **HECO:** If construction is delayed, it can further defer the need of the substation.

   c. **Stakeholder:** If the load growth doesn’t happen, no DER installed, then wouldn’t that also defer the wires need?
      
      i. **HECO:** It is possible.

VII. **Stakeholder:** Question about slide 25 – further explanation. Does this reduce the MVA needed by location?

a. **HECO:** If we solve for the needs on circuit BB, we can effectively reduce and reevaluate the needs of circuits AA, CC, and DD.

b. **Stakeholder:** Is there a priority over which solution type you would take first?
   
   i. **HECO:** Demand based solutions would be solved for first.

   c. **Stakeholder:** Would different types of projects bid into the RFP based on the contingency requirements – AA, BB, CC, or DD? Would this change the way a developer proposes a bid? Does this mean you wouldn’t get what you want/need in the proposal?
      
      i. **HECO:** We are seeking proposals that meet the entire need. The evaluation method is a proposed way of efficiently evaluating the proposal to see how much of the circuit needs can be covered. What we are trying to do is to reduce the cost in totality. However, it makes solving for a solution a lot more complicated. In addition, we are trying to capture the potential for the non-wires solution to solve for BB first, then see how the solutions for BB may or may not reduce the needs for AA, CC, and DD. The objective is to reduce the overall costs of the NWA by reducing the scope.

VIII. **Regarding Appendix J, Page 10 Question** –

a. **Stakeholder:** Can you please match up the buckets to what is written in the Appendix?

   i. **HECO:** On Table 9 – The circuits and transformers match those listed, AA refers to Ewa Nui 2, BB... so on and so forth. BB and CC are critical needs, the others follow suit.
Soft Launch RFP Tentative Schedule

<table>
<thead>
<tr>
<th>2019 Milestones</th>
<th>Proposed Date</th>
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</thead>
<tbody>
<tr>
<td>Draft RFP Release</td>
<td>September 3, 2019</td>
</tr>
<tr>
<td>Stakeholder Comments Due</td>
<td>October 1, 2019</td>
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<tr>
<td>RFP is Issued</td>
<td>November 1, 2019</td>
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<tr>
<td>Prerecorded Webinar Conference</td>
<td>November 8, 2019</td>
</tr>
<tr>
<td>Proposal Due Date</td>
<td>December 31, 2019 at 2:00pm HST</td>
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<tr>
<td>Selection of Final Award Group</td>
<td>March 2, 2020</td>
</tr>
<tr>
<td>Contract Negotiations Start</td>
<td>March 9, 2020</td>
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Next Steps

Please submit feedback to: responses@hawaiianelectric.com

Feedback requested by October 1, 2019

Action Items

Final RFP release targeted for November 1, 2019