

## IGP Joint Competitive Procurement Working Group (Meeting #6) and Solution Evaluation and Optimization Working Group (Meeting #5)

Wednesday, November 13, 2019

9:00am - 11:30am

American Savings Bank Tower, Training Room 2

### Attendees

#### In-person

Christopher Lau, HE	Robert Harris, Sunrun	Vladimir Shvets, HE
Greg Shimokawa, HE	Steven Rymsha, Sunrun	Collin Au, HE
Isaac Kawahara, HE	Wren Wescoatt,	Amanda Yano, HE
Dale Murdock, Newport Consulting	Progression Energy	Sorapong Khongnawang, HE
Mike Wallerstein, PUC	Rocky Mould, City and County of HI	Brian Lam, HE
Clarice Schaffer, PUC	Gerald Sumida, Carlsmith Ball/ Uluono	Nohea Hirahara, HE
Gina Yi, PUC		
Jay-Paul Lenker, PUC	Christopher Kinoshita, HE	

#### WebEx

Roderick Go, E3	Noelani Kalipi, Progression Energy	Will Rolston, Energy Island
David Parsons, PUC	Patty Cook, ICF	Duke Oishi, HE
Samantha Ruiz, PUC	Paul Maxwell, Black & Veatch	Eric Kunisaki, HE
Marcey Chang, DCA	Sheila Uyeoka, HDR	James Abraham, HE
Dean Nishina, DCA	Theodore Peck, Holu Hou Energy LLC	Ken Aramaki, HE
Lisa Hiraoka, DCA	Tricia Rohlfing, Hawai'i Pacific Solar	Meredith Chee, HE
Rene Kamita, DCA		Peter Young, HE
Andy McCoy, EPIC		Robert Uyeunten, HE
Erik Kvam, REACH		
Jason Prince, RMI		

### Objectives

- Finalize the high-level IGP Solution Sourcing Process to set the framework for the detailed process steps.

### Agenda

- Welcome & Introductions
  - WG Ground Rules
- Review latest draft of the proposed IGP Solution Sourcing Process
- Review draft process of Pathway for Future Procurements
- Discuss decomposition of Capacity, Energy & AS Needs process step
- Discuss CEAS long-term forecast needs and long term RFI
- Provide updates on CPWG & SEOWG process description outlines
- Next Steps

## Key Takeaways

- Review of the updated IGP Solution Sourcing Process where stakeholders expressed the desire for DER to be integrated into the sourcing process in such a way where DER is accounted for beyond the forecast. There was also expressed interest in reviewing the DER assumptions and forecast.
- Discussion around modeling tools such as RESOLVE and PLEXOS, as well as alternative models. Specific interest in the RESOLVE granularity that covers inputs, outputs, as well as modeling assumptions.

## Discussion

### I. Updated IGP Solution Sourcing Process

- a. Stakeholder suggestion to have the pricing and programs included back into the forecast as a feedback loop. Observed a pricing or program change would have societal benefits of lower cost DER options for NWA opportunities or microgrids. Large-scale procurements with fixed pricing and contract terms, which may benefit the customer in the near-term, may not have the best pricing for customers over the long-term. Stakeholder would like to have pricing and programs identified as a need on the system-level rather than only at the distribution level.
- b. Stakeholder comment, it seems like this was a solution optimization process track that is now a solution sourcing/procurement track. Where are you leaving room for DER?
  - i. HECO: DER could be bid into the procurement track through an aggregator proposal.
- c. Stakeholder asks, will there be an opportunity for stakeholders to provide feedback on the forecast?
  - i. HECO: Yes, the draft forecast is awaiting an energy efficiency forecast from AEG (PUC consultant) as an input before it can be presented to stakeholders and the working group. Targeting January 2020.
  - ii. Stakeholder: Is this only a preliminary forecast?
    1. HECO: Yes, there may be another meeting that follows the January meeting to incorporate stakeholder feedback.
- d. Stakeholder would like to see the forecast and assumptions laid out for stakeholders to review. As the utility retires more base-loaded units, how does the utility define what is needed to backfill the capacity need? Is it by using alternate fuel sources or renewables? Stakeholders need more information on that.
  - i. HECO: The Capacity, Energy and Ancillary Services (“CEAS”) needs step will identify future resource needs. In the subsequent cycle, there will be

an opportunity to revise those needs. Unit retirements will have an impact on the resulting needs.

- e. Stakeholder suggestion to have an option to accept revised pricing if the cost of materials goes down (e.g., lower price of steel, PV panels, etc.). Why isn't there flexibility to set a threshold limit so that prices don't go higher, only lower. That way customers can benefit from market fluctuations.
  - i. HECO: That may be a consideration for a long-term RFP.

## II. **Capacity, Energy, and Ancillary Services Needs**

- a. Stakeholder asks, how does RESOLVE work?
  - i. HECO: RESOLVE models about 30 representative days of the year, every 5 years to create a resource portfolio. PLEXOS does a more detailed check of the resource portfolio on an hourly basis (8760 hours/year).
- b. Stakeholder comment that the RESOLVE sensitivities are not capturing the transmission costs correctly.
  - i. HECO: The transmission costs are accounted for as part of the resource cost inputs into the model.
  - ii. Stakeholder: Don't the NWA needs identify the transmission and distribution needs and costs based on locations? How does that fit into the CEAS diagram?
    1. HECO: Opportunities for NWAs are a part of the transmission and distribution needs step. Transmission needs will also assess potential renewable energy zones for future renewables.
- c. Stakeholder asks, why not use the Switch model or other models? Seems like there are limitations in what you're currently using.
  - i. HECO: The Switch model is very similar to E3's RESOLVE model.
- d. Stakeholder asks, doesn't it matter how you model the transmission constraints? A mile of transmission may not reach the location of the renewable resource. How do you accurately scale that?
  - i. HECO: RESOLVE could consider the resource potential in a particular area and an estimate of the transmission cost to interconnect that resource.
  - ii. Stakeholder: Might need some developer input into determining those transmission costs and what the developer needs.
- e. Stakeholder would like to know, is there going to be a forecast for transmission needs?
  - i. HECO: That would be developed as part of the transmission and capacity, energy, ancillary services needs assessment.

- f. Stakeholder asks, where do weather scenarios fit into the model? Sounds like you take a 30-day representative forecast, but how realistic is this in capturing things like, cloudy days or storms? How often do those types of situations occur in the model, how is that optimized?
  - i. HECO: PLEXOS is an 8760 hourly chronological model so it will model every hour in a year. Renewable profiles would pick up the weather events. Sensitivities can be done to see the effects of extreme weather events.
- g. Stakeholder would like to know, what about the forecast assumptions? Are they going to be static or variable?
  - i. HECO: They will be static, but sensitivities can be done to assess the impact of changes to those forecasts.
- h. Stakeholder comments that it sounds like the needs are identified outside of the working groups. What is the process for determining the system needs? How does that get integrated into the modeling?
  - i. HECO: The process for identifying the needs for capacity, energy and ancillary services is part of the SEOWG. Additional model inputs that are used to define those needs can be discussed in this working group.
- i. Stakeholder asks, how does RESOLVE handle curtailment?
  - i. HECO: For DER, we developed curtailable and uncurtailable buckets for resources, using a take-or-pay assumption.
  - ii. HECO: As a starting point, we are modeling the system as it is currently operated.
    - 1. Stakeholder: Perhaps there should be sensitivities for other ways of modeling the system.
  - iii. Stakeholder: How do we optimize the needs other than only at the system level?
- j. Stakeholder suggests a strong emphasis on modeling from a bottom-up approach. Stakeholder comment that the current modeling is not a correct analysis.
  - i. HECO: Our approach is to evaluate on total resource cost. We can have further conversations on how the distributed resources would be represented in the model.
- k. Stakeholder asks, why is the load not reoptimized to promote customer savings and flexibility to integrate more renewables? What is HECO's plans for DER programs other than curtailing them?

- i. HECO: The gross daytime peak is shifted into the evening by a large quantity of daytime renewables. Now the issue is addressing the evening peak, and the model is optimizing for that.
    - ii. Stakeholder: It doesn't seem like there is a plan for creating DER opportunities to perform that load shifting for the evening peak. It seems like a flawed process.
  - I. Stakeholder asks, how are we accounting for the benefit of geographic resilience?
    - i. HECO: The resilience working group is currently working on a draft of resilience criteria to be considered in IGP. The criteria may influence a non-price evaluation.
  - m. What other sensitivities should be considered to inform a final resource portfolio?
    - i. Stakeholder: Would like to see the range of resources that are most valuable to the resource mix. Maybe 10 scenarios, which include – solar plus storage 40-60%, wind 20-35%, and DER 20-30%. Short term and long-term goals. Realistically you won't get what you want in a procurement. It would be beneficial to shape the procurement to target specific project types and have flexibility.
    - ii. Stakeholder: We should also look at the shortcomings of a procurement, and ways to improve.

### III. Long Term RFI Process Discussion

- a. Stakeholder concerned that a non-binding RFI provides low-value to the process. Previous RFI did not lead to anything.
- b. Strong stakeholder request for flexibility to accept projects with near term and long-term timeframes to come online. This improves the range of resource types that may be proposed. New technologies might not want to or be able to participate if there isn't an open window for them to enter the market.
  - i. Flexibility in RFP to consider projects with different timeframes could eliminate the need for an RFI and allow long-term projects to bid into the same RFP as short-term projects.

### IV. Additional Comments

- a. Suggestion to bullet point the comments that you heard into the slide deck. Key takeaways, action items.

### CPWG Upcoming Meeting Schedule

Meeting 7 – December 9, 2019	Review 2nd draft of RFP requirements. Finalize Prequal requirements. Finalize timeline and dependencies for these steps.
Meeting 8 – Week of December 16, 2019 (tentative)	Conference call, review and discuss consolidated stakeholder comments on 2 <sup>nd</sup> draft of RFP requirements.
Meeting 9 – January 8, 2020	Finalize RFP requirements. Review Competitive Bidding Framework (CBF) and develop initial recommendations for updates in the context of the Prequal and RFP process.
Meeting 10 – February 12, 2020	Develop initial process and requirements description for T&D NWA RFP (informed by Soft Launch); update 2 <sup>nd</sup> draft of CBF recommendations
Meeting 11 – Week of March 2, 2020 (tentative)	Conference call, review 2 <sup>nd</sup> draft of NWA RFP, 3 <sup>rd</sup> draft of CBF recommendations
Meeting 12 – March 13, 2020	Finalize NWA RFP and CBF recommendations

### SEOWG Upcoming Meetings Schedule

Meeting 6 – December 9, 2019	Review of initial new evaluation and optimization methods for 1 <sup>st</sup> IGP cycle
Meeting 7 – Week of December 16, 2019	WebEx meeting to discuss results of Meeting 6
Meeting 8 – January 8, 2020	Review first draft of all deliverables
Meeting 9 – February 12, 2020	Lessons learned from Stage 2 RFP Review near-final drafts of all deliverables
Meeting 10 – March 18, 2020	Final Meeting – Final review of all deliverables Discuss any next steps

### Next Steps

- Meeting notes will be posted to IGP website
- Send any additional comments on the IGP Solution Sourcing Diagram by November 22
  - Need to finalize this high-level process flow to develop details of individual process steps
  - Feedback may be sent to – [IGP@hawaiianelectric.com](mailto:IGP@hawaiianelectric.com), or Chris Lau [christopher.lau@hawaiianelectric.com](mailto:christopher.lau@hawaiianelectric.com) (SEOWG), or Greg Shimokawa [greg.shimokawa@hawaiianelectric.com](mailto:greg.shimokawa@hawaiianelectric.com) (CPWG)
- Reach agreement on the CEAS needs process step by January 8, 2020