

## Technical Advisory Panel (TAP) Meeting

Wednesday, February 24, 2021

10:30am – 12:30pm

Webex

### Attendees

Aiden Tuohy, EPRI

Andy Hoke, NREL

Derek Stenclik, Telos

Energy

Jeffrey Burke, APS

Matthew Richwine, Telos

Energy

Sean Morash, EnerNex

Terry Surlles, HNEI

Richard Rocheleau, HNEI

Colton Ching, HE

Earlynn Maile, HE

Ken Aramaki, HE

Marc Asano, HE

Robert Uyeunten, HE

Chris Lau, HE

### Objective

- Review HECO's plan to prioritize and streamline TAP member input across a variety of topic areas

### Agenda / Discussion Topics

- Meeting Recap
- Regulatory Updates and Background on Commission Guidance
- Discussion of Key TAP Working Group Topics

## Discussion

- Stakeholder: Like the idea of multiple tracks to focus on where we can best contribute.
- Stakeholder: Do we need a transmission track (not just resource-oriented)?
  - HECO: How do we think about the services that our old generation units provide?
    - Stakeholder: Models don't do a good job of this. They often say keep the older units online through a fixed O&M.
    - Stakeholder: Three topics that then could feed into a larger discussion around retirement planning
      - Capacity
      - Transmission stability
      - Resilience
    - Stakeholder: Other utilities are facing the same issue with respect to the extension of generating unit life. One utility identified the units that didn't serve the needs anymore so those were easy to retire, but it will be hard to identify among the more dispatchable units which/when to retire.
  - HECO: Do we need a model assessment group? How we use RESOLVE and PLEXOS to evaluate bids? This would be used to discuss how the model is characterizing other grid services (e.g. regulation / FFR)
    - Stakeholder: I like this idea, but how could TAP really help in identifying better evaluation techniques without doing all of the work?
    - HECO: We're really looking for input on how/when you pass between the various models.
      - Stakeholder: This will require discipline on the timing and stages here.
    - Stakeholder: We need to be careful not to reassess everything with different models. This could all be under the umbrella of reliability, but mostly after value definition (what do I need to keep the grid on?).
      - Stakeholder: With respect to how to pass between models, our utility follows this general path for evaluation in an RFP:
        - Use a high-level model to narrow things down and screen
        - Then a capacity expansion model like Strategist
        - Then even more granular model like Aurora
          - Ensure all requirements are met
          - Granular = hourly and sometimes sub-hourly.
      - HECO: This is similar to how we did the Stage 1 and 2 RFPs.
    - HECO: Is the evaluation done to select multiple projects or a single proposal?

- Stakeholder: We've done both in the past. Bucket resources based on characteristics then take the best out of each bucket. May do one or multiple awards.
- HECO: What about a system security track that considers grid operation for low system inertia systems?
  - Stakeholder: This is fine under the procurement and operations piece, but we're going to want to emphasize flexibility.
  - HECO: In resource plans, what investments are needed to keep the system secure? Goes to transmission planning criteria, contingencies under evaluation, interplay between inertia, FFR, PFR. Will grid forming inverters help to reduce synchronous condenser investments?
  - Stakeholder: Whenever we settle on the topic areas, need to settle on some questions. Then, use the first meeting of a given track to cover these questions and scope.
    - HECO: Agreed, we will draft those questions.
- Stakeholder: Procurement and Ops – Maybe drop the reliability and future RFP topics from this area. Need to focus on near/medium-term.
  - HECO: The potential work break down here is to solidify the framework over the next few months, then analyze the more complicated topics (retirements, DER, synchronous condensers) that inform future topics.
- HECO: How do we fit the emerging topic of resilience in here, considering how it touches on generation, transmission, and distribution? Microgrids would be a very effective resilience solution that wouldn't fit neatly into traditional planning buckets.
  - HECO: Shifting to a weather-based and storage resource portfolio, the nature of generation shortfalls shift. Generation shortfalls may be less frequent, but potentially severe in impact.
- Stakeholder: Do we have ways of handling bids that are different than what was planned for?
  - HECO: This is similar to what happened out of the 2016 PSIP. We wound up selecting solar but the plan was for wind and solar.
  - HECO: Part of the aim of IGP is to allow for market solutions. The needs of the system are prioritized over technologies.

## Next Steps

- HECO to reorganize and prioritize topics with questions for each topic area
- HECO to send updated topics/questions to TAP for additional comments
- Next meeting – TBD, 2021
  - Feedback and questions may be sent to Chris Lau at [igp@hawaiianelectric.com](mailto:igp@hawaiianelectric.com).