

## **IGP Solution Evaluation and Optimization Working Group Meeting #3**

**Friday, September 20, 2019**

**9:00am - 12:00pm**

**American Savings Bank Tower, Training Room 1**

### **Attendees**

#### **In-Person**

Christopher Lau, HE

Dale Murdock, Newport  
Consulting

Isaac Kawahara, HE

Christopher Kinoshita, HE

Vladimir Shvets, HE

Collin Au, HE

Amanda Yano, HE

Sorapong Khongnawang, HE

Yoh Kawanami, HE

Greg Shimokawa, HE

Marc Asano, HE

Nohea Hirahara, HE

Jay-Paul Lenker, PUC

Clarice Schafer, PUC

Wren Wescoatt, Progression  
Energy

Erik Kvam, REACH

#### **WebEx**

Marcey Chang, DCA

Dean Nishina, DCA

Patty Cook, ICF

Richard Wang, HE

Jun Zhang, E3

Jessie Ciulla, RMI

Kylie Cruz, Blue Planet

Rene Kamita, DCA

Rich Barone, HE

Richard Wang, HE

Riley Saito, Hawai'i County

Steven Rymsha, Sunrun

Jasmine Ouyang, E3

Lisa Hiraoka, DCA

## Objectives

- Overview of the Resource & Ancillary Services Needs and Initial Portfolio Evaluation process steps
  - Purpose & Drivers
  - Inputs
  - Outputs
  - Methodology
- Complete an outline of today's discussion that will be distributed for feedback as we develop the evaluation methodology and processes.

## Agenda

- Welcome & Introductions
  - WG Ground Rules
- Review Solution Evaluation and Optimization Working Group (SEOWG):
  - Role and Objectives
  - Deliverables
  - Schedule
- IGP Planning and Procurement Process Discussion
- Next Steps

## Key Takeaways:

- Strategically placed feedback loops in the IGP sourcing diagram may help to better inform the process
- Providing additional transparency and details on the results of the needs assessments would be helpful to understand this process step

## Discussion:

- I. SEOWG Deliverables
  - a. Deliverables for this working group include descriptions of the methodologies for the identification of system needs and evaluation of system resources in a T&D Non Wires Alternative (NWA) RFP and two part Capacity, Energy, and Ancillary Services RFP
- II. Review of previous meeting
  - a. Discussion of methodologies from other utilities and lessons learned from NWA DER solicitation evaluation and planning
  - b. Discussion on evaluation of solutions with various contract-term length
- III. Resources and Ancillary Service Needs
  - a. Purpose and Drivers
    - i. Identifying the quantity and timing of future capacity, energy and ancillary services ("CEAS")
  - b. Inputs
    - i. Forecasted assumptions (sales, DER, EE, EV, fuel, resource cost) should be available from the forecasting group by 2020

1. The FAWG is working on the sales forecast for broader IGP process
  2. The sales forecast along with the fuel forecast and other forecasts are part of the inputs for the systems needs evaluation that is the start of the first IGP cycle
  - ii. Planned assumptions (filed and approved for Stage 1 RFP projects, Stage 2 final award group)
  - iii. Unit characteristics (min/max capacity, heat rate, ramp rate, etc.)
  - c. Outputs
    - i. Capacity, Energy & Ancillary Services (“CEAS”) needs are developed in a technology and resource capability agnostic manner
    - ii. CEAS incremental needs will be presented in 5-year increments, starting in 2025 and going through 2045.
    - iii. The CEAS needs inform RFP Part 1 procurement needs:
      1. Allows bidders to indicate interest in projects with short development times that may meet 2025 needs
      2. CEAS incremental needs for 5-year increments starting in 2030 through 2045 may be useful information for stakeholders who are considering projects that require a longer development time beyond 5 years
    - iv. The needs will be agnostic of technology type and will be in terms of MW or MWh depending on the need.
  - d. There was general discussion about the benefit and need for releasing anonymized results of the RFP Part 1 market test
  - e. Proposed Methodology
    - i. Determine the needs in a two-part process:
      1. Step one – develop an initial assessment using a capacity expansion model (RESOLVE) in 5-year increments
        - a. The Companies did not use the SWITCH model in the 2016 PSIP
        - b. Inputs such as DER and Energy Efficiency are accounted for in the forecasts being used.
      2. Step two – verify the portfolio using an hourly production simulation for all years in the planning horizon (PLEXOS)
    - ii. Analyze the results for any residual FFR needs
- IV. Initial Portfolio Evaluation – RFP Part 1 Market Test
- a. Purpose and Drivers
    - i. Create a portfolio of potential projects to:
      1. Better understand market interest and capability
      2. Understand indicative pricing and operational capabilities
      3. Further assess interconnection needs and impact on transmission infrastructure and,
      4. Identify possible NWA opportunities at the transmission level
  - b. Inputs

- i. Incorporate the inputs from the RFP Part 1 size (MW/MWH), indicative pricing, potential project location(s) , commercial operation date, technology type and operational characteristics.
- c. Outputs
  - i. Representative portfolios of potential resources and ancillary services provided by the RFP Part 1 market test
  - ii. Indication of the market's willingness to fulfill the need
    - 1. Coming out of the need's assessment, we will identify needs that need to be procured
    - 2. If there are not enough proposals to meet all the needs for the specific COD, then the Companies will evaluate other procurement paths including potential for new or expanded utility programs or tariffs.
  - iii. NWA Analysis
    - 1. There may be additional transmission requirements for received projects
- d. Proposed Methodology
  - i. New DER programs would be folded into the resource and services needs through the sales forecast
  - ii. Stakeholder: There should be a mechanism that allows feedback on the results from the RFP Part 1
- e. Discussion
  - i. There was further discussion and questions about how the RFP Part 1 market test will help inform the needs evaluation?
    - 1. There followed discussion describing how a function of the RFP Part 1 procurement is to identify if there is enough interest from developers/bidders to meet the need. RFP Part 1 also serves to identify what additional transmission infrastructure must be addressed in order to interconnect proposed projects. If RFP Part 1 market test indicates less interest than needed, then the Companies may need consider other procurement options through new or expanding programs or tariffs
  - ii. It was suggested that it would be helpful to have a summary of the evaluation methodology that was used and what are the results in the IGP procurement. There was interest in appropriately sharing the, results of the RFP Part 1 initial portfolio evaluation, similar to the comments for the system needs assessment. These results should be documented appropriately and shared if possible.
  - iii. In discussion, it was recognized that confidentiality of proposal details and the resultant potential portfolio(s) must be respected and thus there will need to be additional discussion about how to appropriately keep all stakeholders informed while respecting confidentiality.
  - iv. Along the same lines, there was discussion regarding how RFP Part 1 and RFP Part 2 are evaluated together and how much – if any – information

could or should be disclosed following RFP Part 1 portfolio without jeopardizing the commercial confidentiality (pricing, capability, location, etc.) of proposals that may move on to RFP Part 2.

1. There was a question raised regarding how programs and pricing integrate customer-side resources into the IGP process, and if competitive procurement was being viewed as the primary sourcing mechanism. Further discussion ensued with description of how proposed new DER tariffs and expected uptake would inform the DER forecast as an input to the system needs assessment process. As mentioned in the earlier discussion, the Company's intention is to utilize all three P's (programs, pricing, and procurements), and not solely rely or focus on procurements.

V. Next Steps – Deliverables and the System Needs & RFP Part 1 Evaluation Process and Methodology

The WG discussed the next steps which will focus on development of an annotated outline describing a proposed methodology and process for:

- a. System Needs Identification
- b. RFP Part 1 Portfolio Evaluation

The first draft of the outline will be developed by the Company and sent out as a WORD document to WG members. WG members are asked to review and provide comments and edits to the draft outline and return to the Company by (FILL IN THE DATE). The Company will consolidate all comments into a Second Draft and circulate the consolidated draft to WG members in advance of a conference call to be held with WG members the week of October 14<sup>th</sup>.

The deliverables and schedule as shown here were reviewed with the WG:

- **Meeting 4 – Week of October 14, 2019**  
WebEx meeting to discuss results from Meeting 3 on Sept. 20
- **Meeting 5 – November 13, 2019**  
Capacity, Energy & AS Evaluation and T&D NWA RFP Evaluation
- **Meeting 6 – Week of November 18, 2019**  
WebEx meeting to discuss results from Meeting 5
- **Meeting 7 – December 9, 2019:**  
Review of new evaluation and optimization methods for 1st IGP cycle
- **Meeting 8 – Week of December 16, 2019:**  
WebEx meeting to discuss results from meeting 7

- **Meeting 9 – January 8, 2020:**  
Review first draft of deliverables
- **Meeting 10 – February 12, 2020:**  
Review 2<sup>nd</sup> draft of deliverables
- **Meeting 11 – March 18, 2020:**  
Final Meeting – Deliverables Due

## SEOWG Deliverables and Deadlines

- Due 1/8/2020 –
  - Description of the methodology for identifying capacity, energy, ancillary service needs
  - Description of the evaluation methodology to be used for the initial system market test portfolio (RFP Part 1), specifically how potential resource acquisitions will impact transmission system needs and non-wires opportunities
- Due 2/12/2020 –
  - Description of the evaluation methodology for,
    - T&D Non-wires RFP
    - System resources in RFP Part 2
  - Description of the optimization methodology to be used for proposed solutions that may address multiple resource/grid needs.
- Comments on Deliverables: None

## SEOWG Upcoming Meetings Schedule

Meeting 4 – Week of October 14, 2019	WebEx to discuss Outline results of Meeting 3
Meeting 5 – November 13, 2019	Capacity, Energy, and AS Evaluation and T&D NWA RFP Evaluation
Meeting 6 – Week of November 18, 2019	WebEx to discuss results of Meeting 5
Meeting 7 – December 9, 2019	Review of new evaluation and optimization methods for 1 <sup>st</sup> IGP cycle
Meeting 8 – Week of December 16, 2019	WebEx meeting to discuss results of Meeting 7
Meeting 9 – January 8, 2020	Review first draft of deliverables
Meeting 10 – February 12, 2020	Review second draft of deliverables
Meeting 11 – March 18, 2020	Final Meeting – Deliverables Due

## Next Steps

- Meeting notes and slide deck will be posted to IGP website
- Use the discussion from today’s meeting to draft an outline for further comment
  - To be emailed to working group attendees
  - Feedback will be reviewed at the next SEOWG meeting
    - Next meeting scheduled for the week of October 14
      - WebEx, Time TBD
- Provide feedback to the Outline.
  - Responses send to [IGP@hawaiianelectric.com](mailto:IGP@hawaiianelectric.com) and [christopher.lau@hawaiianelectric.com](mailto:christopher.lau@hawaiianelectric.com)