IGP Distribution Planning Working Group Meeting 8

Wednesday, October 9, 2019
1:00pm – 4:00pm
American Savings Bank Tower, Training Room 1

Attendees

In-Person

Marc Asano, HE
Paul De Martini, Newport Consulting
Christopher Lau, HE
Isaac Kawahara, HE
Greg Shimokawa, HE
Rebecca Dayhuff Matsushima, HE
Nohea Hirahara, HE
Vladimir Shvets, HE
Amanda Yano, HE
Alan Hirayama, HE
Yoh Kawanami, HE
Anthony Hong, HE
Ken Aramaki, HE
Blaine Hironaga, HE
Randall Lui Kwan, HE
Gerald Sumida, Carlsmith Ball
Jay-Paul Lenker, PUC
Gina Yi, PUC
Clarice Schafer, PUC
Robert Harris, Sunrun
Marcey Chang, DCA
Wren Wescoatt, Progression Energy
Riley Ceria, HELCO
Trinity Burruss, Sunworks USA
Keith Block

WebEx

Caroline Carl, Hawai'i Energy
Corinne Chang, HE
Damon Schmidt, HE
Dean Nishina, DCA
Dennis Lee, HE
Donald Hall, Quanta Technology
Enrique Che, HE
Eric Kunisaki, HE
JP Ogata, HE
Jeremy Laundergan, EnerNex
Jessie Ciulla, RMI
Jon Sakata, HE
Kandice Kubojiri, HELCO
Kayla Kawamata, HE
Kerstan Wong, HE
Li Yu, Quanta Technology
Lisa Hiraoka, DCA
Liza Jang-Che, HE
Marie Olt, HE
Marisa Chun, HE
Melanie Higa, HELCO
Meredith Chee, HE
Mike Wallerstein, PUC
Norman Nakagawa, HE
Phil Gerwien, HE
Randall Shiro, HE
Reid Shibata, Puget Sound Energy
Riley Saito, County of Hawaii
Richard VanDrunen, HE
Steven Rymsha, Sunrun
Susan Char, HE
Susan Chow, HE
Tricia Rohlfing, Hawai'i Pacific Solar
Will Chang, HE
Will Rolston, Energy Island
Zhuoning Liu, Quanta Technology

Objective

- Obtain stakeholder feedback and have a discussion on the proposed non-wires alternatives (NWA) Opportunity Evaluation Framework to be used in 2019 and the first IGP cycle to identify viable NWA opportunities.

Agenda

• Soft Launch Update
• Stakeholder Feedback – NWA Framework Straw Proposal
• Case Study Exercise
• Stakeholder Discussion
• Next Steps

Stakeholder Discussion on NWA Opportunity Evaluation Process

(Comments summarize stakeholder discussions and comments; Company comments noted by The Companies)

Review of T&D Capital Budget (Slides 13-14)

- Pie chart represents total project costs ($ amounts = prior years + forecasted future years), where the project was forecasted to spend >$1M in 2019.
- Slide 13 reflects the type of projects currently in the budget for each category.
- Stakeholder suggested deferral of future infrastructure upgrades or reduce asset management risk by using a programmatic approach.
    - The Companies noted that it depends on the type on aging infrastructure. Projects such as replacements of switches, poles, spares, etc. cannot be replaced by NWAs.
- Other types of infrastructure such as transformers undergo preventative and predictive maintenance to determine the health of assets. It may be difficult to determine whether a program would help of defer replacement of existing infrastructure.
- All parties acknowledge that integration of DER may trigger circuit upgrades or potential additional NWA opportunities. Over time, the T&D capital budget may start to shift to include more NWA opportunities (i.e., EoT and DER integration, resiliency opportunities, etc.).

Stakeholder Comments on NWA Opportunity Screen

- Consider a programmatic approach that gives the opportunity to propose different types of solutions – a baseline program that can serve various needs on a systemwide approach, not necessarily limited to local needs.
- Issue raised that across the industry, NWAs have largely not been successful thus far, so a programmatic approach that looks to fulfill more global needs could be a better approach.
- The Companies noted that the DER proceeding may take up this issue. The screening process is not meant to take opportunities off the table but to screen out non-qualified

opportunities and then prioritize the qualified ones. Whether a sourced through a procurement or program, the NWA is based on needs and must be cost-effective.
    - Agreement from stakeholders that even a programmatic approach must be cost-effective.
- Depending on timing of programs versus procurements, and the pricing constraints, the program may lock customers in for pricing that could be cheaper if sourced through a procurement.
- Consider greenhouse gases (GHG) in Step 2 prioritization metrics.
    - The process should be simple, and that considering GHG may not be necessary even though NY considered GHG in the evaluation.
    - GHG is a factor that is considered, however, GHG may be insignificant and spending too much time mulling it over may delay moving the process forward.
    - Agreement that GHG may be better suited to be taken up in the SEOWG but not necessary for Step 2; however, must ensure it does not stall the evaluation process.
- Step 2 prioritization metrics should also consider community impact.
- Make the proposed metrics more quantifiable:
    - Timing: in-service date – allow at least 2 years to provide enough time to run a procurement, regulatory process, and install NWAs.
    - Economic Assessment: Utilize a $1M threshold.

Case Study Examples

- Koa Ridge
    - Stakeholder consensus: Deemed a qualified NWA opportunity because it falls into the "system expansion" category.
    - Performance Requirements: Yellow/Red categories because of long-duration and high-magnitude overloads.
    - Timing: Green category because more than 2 years before the NWA is needed.
    - Forecast Certainty: Green/Yellow since the housing development is actively being worked on.
    - Market Assessment: Green/Yellow since there is an existing substation with a customer base that may be utilized to provide NWA.
    - Economic Assessment: Green because the cost of the wires solution is greater than $1M.
- Ala Moana Area TOD
    - Stakeholder consensus: Qualified NWA opportunity because it falls into the system expansion category.
    - Performance Requirements: Yellow for Slide 35 opportunity because of the longer duration; Green for the Slide 36 opportunity because magnitude is small and duration less than 6 hours.
    - Timing: Green, because need is forecasted out in future years.
    - Forecast Certainty: Yellow/Green uncertain whether developments will materialize.

    - Market Assessment: Green because located in dense urban core with a lot of potential customers to provide services.
    - Economic Assessment: Tentatively Green, no wires solution determined yet but likely to be greater than $1M.
- Overhead (OH) to Underground (UG) Line Conversion and Salt Lake Blvd OH Lines Relocation
    - Clarified that these projects involve relocating a portion of an existing line; and therefore, the alternative is to remove that line. This means that downstream loads will be removed off the grid.
    - Consensus was reached that these types of opportunities are not feasible NWA opportunities. These categories of projects would be put into the non-qualified category in Step 1.
- Waiau New 46kV GIS Bus Replacement – Aging infrastructure replacement
    - Consensus reached that this type of project also not an ideal NWA opportunity due to the alternative of taking loads off the grid.
    - The 46kV substation bus provides system benefits by allowing renewable projects and DER to export renewable energy to other parts of the grid.

Soft Launch RFP Tentative Schedule

- **Meeting 9** - Proposed distribution planning methodology enhancements for 2020 IGP (4hrs)
- **Meeting 10** - Distribution planning integration with Resource & Transmission planning process (4hrs)
- **Meeting 11** - Distribution planning load scenarios and sensitivities methodology (4hrs)
- **Meeting 12** - Proposed distribution planning load scenarios and sensitivity methodology (4hrs)

Next Steps

- Stakeholder feedback on upcoming agenda topics
- Next meeting: November – TBD
- Please send any additional comments on proposed approach to:
    - IGP@hawaiianelectric.com and Marc Asano (marc.asano@hawaiianelectric.com)

Action Items

- Stakeholder comments from today's meeting will be incorporated into the NWA Opportunity Evaluation Framework. This deliverable will be posted on the IGP website for stakeholder comments. The framework will be utilized next year for the first IGP cycle.