

CBRE Order 37592 - Stakeholder Working Group Meeting #1

Thursday, February 11, 2021

4:00pm – 5:00pm

WebEx

Attendees

Stakeholders:

- Gerald Sumida (Carlsmith Ball / Ulupono Initiative)
- Samantha Ruiz (Ulupono Initiative)
- Marcey Chang / Rene Kamita (Consumer Advocate)
- Isaac Moriwake / Kylie Wager Cruz (Earthjustice/Hawaii Solar Energy Association/BluePlanet)
- Ryan Morita (Hawaii State Energy Office)
- Dr. Lewis Hashimoto (Arroyo Seco Consulting, CBRE Independent Observer)

Hawaiian Electric:

- Lani Shinsato, Director, CER Programs
- Yoh Kawanami, Director, CER Operations
- Mark Wong, Manager CER Community & Commercial Programs
- Troy Milhoan, Christyn Senda, Ellyse Mazzi; Program Managers, CER Community & Commercial Programs
- Greg Shimokawa, Acting Director, Renewable Acquisition
- Kevin Oda, Sr. General Counsel
- Marc Asano, Director, T&D and Interconnection Planning
- Jason Reyes, Manager, Interconnection Services
- Blaine Hironaga, Distribution Planning
- Kanoa Hsun, T&D Planning
- Chris Lau, Manager, Corporate Energy Planning
- Marisa Chun, Regulatory Analyst

Objective

- Hawaiian Electric (HE) to gather feedback from stakeholders on recommendations to improve interconnection process

Agenda

- Welcome & Introductions
 - CBRE Order 37592 Overview
 - Ground Rules
- Overview of Interconnection Topics
 - Scope and Schedule
 - Proposed Topics for Filing Recommendations
 - Feedback from Parties
- Next Steps

Discussion

I. **Interconnection Process for Small Projects (slide 9)**

- a. Stakeholder: What is the difference between Red and Blue boxes?
 - i. Speaker: Red are steps HE is continuing to develop; Small Projects will be following Rule 14H; CCRP on the CBRE Portal going live tomorrow night

II. **Interconnection Process for RFPs (slides 10-14)**

- a. Stakeholder: Could you highlight where efficiencies could be gained in this process?
 - i. Speaker: Iterative nature of IRS takes time to do, open to ideas on how proposals can be better prepared to move quickly

III. **Hawaiian Electric Proposed Interconnection Improvements (slide 16)**

- a. Stakeholder: Could you explain what unit cost pricing is in this context?
 - i. Speaker: More in traditional sense of developers being asked to budget cost for company owned interconnection facilities; more detailed/better designed cost information (i.e. primary/secondary meters)
- b. Stakeholder: Molokai letter on Dec 3, PUC proposed alternative bidding mechanisms, are we considering that for CBRE?
 - i. Speaker: We are processing and tracking this proposal

IV. **Suggestions from other Dockets (slide 18)**

- a. Stakeholder: Responding to the PUC's mandate we need to think bigger. Need more transparency on grid limitations and opportunities (better more granular detail in LVM), more transparency on what developers are paying for during IRS process and ability to appeal to an independent engineer, the need to standardize/streamline the process i.e. fast tracking projects that meet certain minimum requirements, possibility of expanding scenarios where company will waive IRS for small projects, being able to control cost (i.e. in CA standard fee for interconnection, cost envelope in CA/MA), having an independent engineer provide oversight
 - i. Speaker: We have looked at other jurisdictions as well, if there are quick hits, we can get that started. In terms of thinking bigger, we agree.

V. **Additional Comments**

- a. Stakeholder: Who does your IRS? In house or outside? How do you distinguish?
 - i. Speaker: For larger projects, we use various contractors.
- b. Stakeholder: How are costs determined before passed on to developer?
 - i. Speaker: For the IRS cost we bid out to multiple contractors to get the best pricing available and do a sanity check against historical costs.
- c. Stakeholder: It's good to bid out competitively but this must add time to the process. In DER rooftop concept, questions came up in past if there is a learning curve that can reduce costs.
 - i. Speaker: As we have more renewable energy and less conventional generation, studies will get more complex as we move forward since we will lean on these (large project) systems more; industry and grid is changing so, don't anticipate we'll be able to take what's learned at present and have the benefit of it accurately depicting what will come in the future.
- d. Stakeholder: How is facility study different than IRS? Who pays?
 - i. Speaker: Cost of doing work for facility study is paid by developer. In house engineers do this work. Parallel process to impact studies. Unless there's something 'big' the preliminary study may not change.
 - ii. ADDED clarification from attached whitepaper:

BESS (if applicable) project. Validation and verification of these computer models is essential to ensure an accurate representation of their impact to the grid can be evaluated in the Interconnection Requirements Study ("IRS"), collectively comprised of:

1. System impact study that determines the interconnection facilities and requirements to safely and reliably interconnect the project to the grid and that ensures compliance with all performance requirements of the PPA;
 2. Facility study which provides the estimated cost and schedule for any Company-owned interconnection facilities.
- e. Stakeholder: Is it fair to say the facility study is for company-owned interconnection facilities? What is the dividing line between facility study and IRS?
- i. Speaker: Yes; IRS is umbrella term to cover both the Facility Study & the System Impact Study
- f. Stakeholder: What are the main bottleneck areas on utility and developer side?
- i. Speaker: Validate inverter models meet PPA requirements, developers typically haven't thought through all details. In Phase 1, 9-10 iterations (10 mo). In Phase 2 we gave more model details and test parameters, improved Stage 2 timelines 2-5 mo. Developers that already went through the process only took 1 iteration. In CBRE we provided documentation in the RFP. Developer changes to equipment impacts overall study (needs to be re-run) and delay final outcome. Industry and technology is constantly changing and improving. Getting complete model information, sometimes consultant resource constraints, possibly sole sourcing instead of competitively bidding, typical issues of permitting/construction
- g. Stakeholder: Regarding modeling, who works with the developers?
- i. Speaker: Mainly contracted resources
- h. Stakeholder: Could there be a single POC?
- i. Speaker: A system integrator would help
- i. Stakeholder: If equipment changes, how far back does the developer go?
- i. Speaker: It depends, for example if changing to a different model inverter of the same brand, it could be a simple/limited restudy; but a major changes like switching vendors and going from AC to DC coupled could cause the interconnection study to start over.
- j. Stakeholder: Can any of these steps be removed for smaller or medium projects to avoid getting stuck in this loop?
- i. Speaker: In CBRE Phase 1, not all required an IRS
- k. Stakeholder: What are the timeframes approx. for each phase? Are all phases handled by inhouse or contracted out? Are there areas that are essentially identical for every project susceptible to streamlining?
- l. Stakeholder: How much time will be shaved by improving steps?
- i. Speaker: We are in progress of working on adding approx. timelines; we will be addressing in PBR.
- m. Stakeholder: This is a policy call – similar to issues from small rooftop systems – how can we translate to CBRE scale side?
- i. Speaker: We will take these ideas back and figure out what are the quick wins and what can be put in parking lot, will be results focused.
- n. Stakeholder: Independent engineer and process to settle disputes?
- i. Speaker: Currently out of scope of work for the IO, seeking feedback from the Parties.
- o. Stakeholder: Why does HECO ask developer to sign a hold harmless agreement?
- i. Speaker: Standard for interconnection requirements are provided to the developer and are meant to stay confidential, not used elsewhere and subject to change.

- p. Stakeholder: Understand large projects are difficult to cookie-cutter, but perhaps we can focus on smaller to medium sized projects, perhaps we can continue via email
 - i. Speaker: We agree and can continue this discussion over email and/or additional calls as needed

Takeaways

- Interconnection is a complicated issue, especially as more renewable energy is added to the grid and technology is changing
- Main process 'bottlenecks' occur in large projects during the IRS process due to complex model requirements and when developers have significant changes (either equipment or move point of interconnection)
- HE agrees there is opportunity for improvement on timeline and cost transparency and are committed to making progress

Next Steps

- Send any follow up emails to group or to Mark Wong at mark.wong@hawaiianelectric.com
- Hawaiian Electric will work on taking comments back and assessing feasibility
- Feb 22 is next Working Group Meeting (via WebEx) to discuss LMI Customer Enrollment & Verification and General Participation Requirements