State of Hawaii Public Utilities Commission
Public Benefits Fee (PBF)
Technical Advisory Group (TAG) Meeting

Meeting Summary
June 27, 2024
9:30 am to 11:30 am Hawaii Standard Time
Hawai'i Energy Offices with Teams Web Conference Option

9:30 - Agenda

- Attendees (15 in person and 18 virtual) were welcomed.
- All attendees welcomed on behalf of the Commission, thanked for their continued participation, and asked that they share their ideas and questions.
- The Energy Efficiency Manager (EEM) provided an overview of the meeting agenda and objectives. Each attendee introduced themselves by name and organization.

9:40am: EM&V – Review findings from PY22 verification, Applied Energy Group (AEG)

- Reviewed a summary of verification activities.
- Reviewed clean energy technologies (CET) key takeaways
    - Hawai'i Energy's implementation of the TRM algorithms for prescriptive programs was near perfect.
    - AEG verified 101% of Hawai'i Energy's energy savings.
    - Hawai'i Energy did not meet its target for Grid Service Ready measures.
- Recommendations
    - Adhere to the documentation requirements provided in Custom Project Guidance Document.
    - Improve Energy Advantage documentation and data accuracy in tracking database.
    - Indicate the year/vintage of the baseline on projects for which the baseline case depends on the calendar year.
    - Set the Refrigeration Efficiency target as a 5% increase over the previous year's participation.
    - Provided TRM status and next steps.

        - *Question: Given the custom project shortfalls put against the TRM measures and success that happened there-- should there be a move to put some custom measures into approved TRM measures?*
            - *Answer: Yes, there has been a push to make these measures more standardized where it makes sense.*
            - *Answer: We update the TRM once a year and then smaller updates more often, always taking feedback from Hawaii Energy and TAG. AEG revisits the assumptions on a periodic basis.*

    - *Answer: There are some custom measures that don't fit with prescriptive approach, so not everything can go in TRM. But more common measures that could be calculated with an algorithm we'll move toward that. But there too many custom things to do everything that way.*
  - *Question: For the GHG calculation, is it standard kWh conversion to metric tons, or does it incorporate time of use or time of savings into calculation?*
    - *Answer: It's an annual value, from eGRID; so, a factor is multiplied by savings. It's not time-based.*
  - *Question: Any current TRM measures that include non-energy benefits like GHG, carbon savings, etc.?*
    - *Answer: Not currently, but we may soon. We are not sure what this conversation looks like yet.*

10:10am: Custom Project Guidance – Document Update, EEM

- Evaluation guidelines for custom projects were developed in 2022 to supplement the Technical Reference Manual (TRM).
- The goal of the review process was to strike an appropriate balance between ensuring transparency and verification of savings calculations and not over burdening customers with excessive documentation requirements.
- Presented 2024 recommended updates to the Guidance Document, including the rationale for the update.
  - Set a minimum threshold for M&V requirements
  - Replace standard industry practice as the baseline case
  - Change early retirement justification and replacement useful life to reflect real world conditions
  - Update itemized invoice requirements based on what is typically available
  - Develop a process for a more "embedded" EM&V process for review of custom projects
- Provided next steps regarding proposed updates.

  - *Question: Regarding the ISP issue, is it that Hawaii Energy has ability to determine whether they use ISP? Or eliminate ISP as baseline option?*
    - *Answer: Where we landed and refined this over last few days is not to eliminate it but to allow discretion of its use. It was recommended to eliminate it, but the EEM opted to retain it with Hawaiʻi Energy discretion.*
  - *Comment: The embedded EM&V process sounds like it will help Hawai'i Energy throughout the year and make evaluations go smoother.*
    - *Answer: Yes, we think this will be helpful; AEG will still verify on the back-end, but will help things go smoother.*

10:30am: Hawai'i Energy Strategic Roadmap

- Hawai'i Energy presented their 2030 Strategic Roadmap for program years 2022-2030.
- Provided background about how the roadmap was developed, guiding principles, framework, vision and goals.
- Presented the fourteen strategies identified to help Hawai'i Energy achieve its goals.
    - For each strategy, provided insight into strategic partners, and more specific near, mid and long term activities to implement the strategy.
- Identified metrics that Hawai'i Energy will use to measure its success against each goal.
- Presented next steps in the development of the roadmap and ongoing reporting.

        - *Comment: I haven't said so yet, but it is a living, iterative document. It will evolve/change. 2030 isn't that far away.*
        - *Comment: Want to make sure everyone is aware of how much work the Hawai'i Energy team did on this—thank you so much.*
        - *Comment: Peak load energy reduction is treated as a stepchild here and it has a lot more potential. We're handling the peak load with peaking plants, far less efficient and burning high grade fuel; savings is great potential there. And looking at the projected 21 MW savings over 6-7 years, I'm thinking that might be a really conservative estimate.*
            - *Answer: That's good feedback*
            - *Answer: We have other slides, 2 things to recognize: this is looking at what would be attributed to Hawai'i Energy (not the whole portfolio), but also we added the flexible load piece of it as an addition. Recognizing that there may be more value in not reducing the load but being able to shift it. We founded the baseline assumption on what has been modeled in MPS; we know that's not perfect for now. kW peak load reduction has taken precedence relative to kWh for Hawai'i Energy, so that shift is underway already.*
        - *Question: Peak load reduction is that including flexible load?*
            - *Answer: Flexible load will be a separate metric*
        - *Question: That would lead to the question of savings attributable to TOU?*
            - *Answer: We do this all the time; we have to update the MPS, iterate. Hawaii Energy could update the roadmap at any point, but definitely when the new MPS comes out it will all be re-visited.*

10:55am: Valuing Societal Benefits – Initiate discussion about capturing/valuing societal benefits from PBF programs, EEM

- Overall objective is to determine whether and how to create a framework to capture societal benefits in the PBFA portfolio, including which societal benefits to capture and the method for valuing them.
- Today's objective is to frame the topic and prepare for soliciting TAG input in the October meeting.

- Presented multiple options for valuing societal cost benefits (listed in order of most simple to complex)
    - Establish carve outs or minimums for desired customers, sectors, or measures.
    - Use a societal discount rate in the calculation of avoided costs.
    - Incorporate societal benefits into avoided costs.
    - Develop new societal cost test.

        - *Comment: One of the societal benefits mentioned is health & well being – cooling, most of the measures result in a cooler home. Extreme example is incandescent to LEDs, in a cooler home people are more productive, stress goes down. Heat pump waste product is cold air – do something with that cool air.*
            - *Answer: Agree, much more productive in a cooler home.*
        - *Comment: 8760 is probably overkill (for avoided costs). One other thing, GHG reduction or emission reductions are linked to kWh but also think about refrigerants and being able to value that; and push to electrify transportation, so capture that and the increasing energy efficiency.*
            - *Answer: I pulled up the information from California and you can see every hour: transmission, distributions, methane leakage. There's a lot in there, and a separate refrigerant avoided cost calculator for fuel switching.*
        - *Comment: I'm not against calculating societal impact, but against using societal impact to incentivize. It would miss the point. The benefit would be good and we should count it and look at it but shouldn't be used for incentive.*
            - *Answer: I'll clarify that we're talking about avoided costs for the PBFA. The ultimate use for cost test is to decide, but we're talking about driving measures in the portfolio, so things like choosing between parking lot lighting or AC during the day.*
        - *Comment: We need to be careful about how we use it; a party might disagree every time with PBFA.*
            - *Answer: I get that. Would there be a consideration for adding the societal cost as a penalty to the non-clean solution, so you're not driving up the cost. So, penalize the less-clean option. It wouldn't set incentive levels, but look at dollars spent to overall benefit.*
        - *Comment: A challenge to all of us, a decade ago it was about avoiding a particular generation power plant; but now it's competing against a solar farm; be careful about this and how we penalize.*
            - *Answer: You can think in terms of generation and selling kWh to the grid, whereas on the energy efficiency side there's less of that incentive so need to count more of the societal benefit, because they're not making as much money off of that (compared to solar). Do resource characterization, don't look at it as a blanket*

thing. We ignore EE because the economic value and ability to profit off of it is less substantial. Even though there won't be fossil fuel plants in later years, but there is bio-fuel right now. We're underestimating GHG benefits from peak reduction by not including the time components—I know the data is not super accessible here yet, so we would need that from HECO dispatch data.

- *Comment: Societal cost test would likely add more benefits and make the EE portfolio appear even more cost effective (versus the TRC). So it would compare even more favorably to all other resources.*
- *Question: TRC on the current PBFA portfolio is pretty good right? Way over 1?*
  - *Answer: For every dollar invested there is 15 dollar benefit. But yes, as a portfolio it remains very strong. But there are things we're integrating that are more expensive. No more incandescent to LED, lighting is going away.*
  - *Answer: Caroline: 26 cent per kWh first year savings.*

11:20am: Wrap Up, Next Steps

- We want feedback on this. What are your priorities, what do your organizations support? Want to get at what are the top societal benefits we want to capture and how do we want to ensure sufficient resources.

11:30am: Adjourn