



**Energy Efficiency in Hawaii:  
Exploring Improvements through a Community Charrette  
September 26 and 27, 2017**

***Preliminary List of Questions for the EEPS Review Process:***

Please consider the following research questions developed by the Energy Efficiency Management (EEM) Team for potential consideration during the current EEPS Review Process. The EEM Team looks forward to stakeholder input on whether the most important research questions are captured in this list below.

**I. Assessing EEPS Progress to Date**

*EEPS Program Status*

- Is Hawaii on track to meet the EEPS Goal in 2030? Which types of energy savings are being counted toward the EEPS Goal in 2030?
- Has annual electricity demand from HECO and KIUC dropped relative to the 2009 baseline forecasts during the first EEPS performance period? If so, how much of this reduction can be attributed to Public Benefits Fee Administrator (PBFA) and KIUC programs versus other activities (e.g., building codes/appliance and equipment standards, improvements transmission and distribution efficiency and voltage regulation, rate and price effects, legislative mandates, weather, DER penetration and/or other sources?)
- Where and when are the EEPS savings occurring on the grid? What hourly changes to net electricity demand have those changes caused? Where and when might the savings be happening in 5 years and by 2030?

*Public Benefits Fee (PBF) Program Status*

- PBF collections have been declining. How have these effects on PBF collections played out thus far for the PBF portfolio and what are projections for the future?
- Is the current PBF portfolio properly balancing the multiple policy goals (cost-effective energy efficiency, inter-island equity, serving hard to reach customer segments, deep savings, etc.)? Are the PBFA programs supporting customers equitably (particularly in light of both departing load and rate increases anticipated)?
- How are the PBF and PBFA currently supporting DERs other than energy efficiency, for example, by coordinating with HECO demand response (DR) activities and use of PBF funds to support the Hawaii Green Infrastructure Authority's Green Energy Market Securitization (GEMS) program? Is this the right mixture?

**II. Assessing EEPS Savings Opportunity Going Forward**

*EEPS Program Design Issues*

- Going forward, what is the remaining potential for energy efficiency to 2030? What could/should be done to encourage and expand the scope of savings impacts from non-PBF Contributing Entities?
- Given the changing utility industry and technology innovation, how might energy efficiency be valued differently as a grid resource than it has in the past?
- What lessons, if any, can be learned from other states and jurisdictions endeavoring to meet energy efficiency performance standard/resource standard goals? How is Hawaii's EEPS structure similar or different? Should the EEPS goals and/or approach be refined? If so, how?
- What additional or alternative program designs will enable Hawaii to achieve EEPS goals in a timely manner, optimizing costs and distributing benefits fairly to all ratepayers?

#### *PBF Program Design Questions*

- In the wake of the substantial changes made to the PBF Energy Efficiency portfolio in Program Year 2016, dubbed "Hawai'i Energy 2.0", how, if at all, should the PBF program be further changed to address current industry, technology, and economic contexts in Hawaii?
- Does the requirement for achieving "cost-effective" savings to meet EEPS goals require that the PBFA should prioritize the lowest cost savings if the portfolio is struggling to meet expected EEPS savings contribution levels?
- Would it be useful and cost-effective to direct the PBFA to incorporate support for a wider variety of DERs in their program portfolio, in addition to energy efficiency in instances where a different technology or approach or a combination of these would more effectively help customers reduce the amount of electricity they need to buy from utilities?
- Regarding PBF program equity, do any changes need to be made? Where are the opportunities for deep reductions in kWh both in terms of cost-effectiveness and customer value?

### **III. EEPS Framework Issues**

- How do the EEPS goals, progress-to-date and future plans interact with the State's renewable portfolio standard (RPS) goals and other activities, e.g., HECO's community-based renewable energy program (CBRE) and demand response (DR) DER programs?
- When the EEPS Framework was developed, the Commission elected not to articulate specific goals and/or penalties to contributing entities other than PBFA (e.g., HECO, KIUC, the State Energy Office within the Department of Business, Economics and Tourism (DBEDT), cities and counties, State and federal buildings). Should the EEPS Framework include individualized goals and/or penalties (at least for "regulated entities") going forward?
- How are the EEPS metrics working? What refinements to metrics would benefit Hawaii's efforts to achieve EEPS Goals?
- How are the joint effects of DER penetration and other grid modifications affecting the available potential amount and costs of energy efficiency? Is it possible, cost-effective and/or useful to differentiate demand-side reductions attributable to energy efficiency vs. other DERs? When and in what circumstances is this valuable and important to do or not do?
- Regarding measuring time (e.g., hourly) and location impacts for energy efficiency measures, the existing tracking mechanisms have not captured this level detail. Should more granular tracking be prioritized going forward?
- What additional or alternative EEPS regulatory structures will enable Hawaii to achieve energy efficiency goals in a timely manner, optimizing costs and distributing benefits fairly to all ratepayers?