



**Act 164: Hawaii Multi-Unit Dwelling EV Charging Working Group  
November 16, 2015 Meeting Summary**

**Date:** Monday, November 16, 2015 **Time:** 9:00 AM – 12:00 PM

**Place:** State Office Tower, Room 600. 235 South Beretania St, Honolulu, HI 96813

**Working Group members in attendance**

- Mark Glick, Chair, (Representing the Director of Business, Economic Development, and Tourism), Hawaii State Energy Office;
- The Honorable Rosalyn H. Baker, Chair of the Senate Committee on Commerce and Consumer Protection and Health
- Matthew K. Yoshida (Representing The Honorable Angus L.K. McKelvey, Chair of the House Committee on Consumer Protection and Commerce)
- Catherine P. Awakuni Colón, Department of Commerce and Consumer Affairs
- Sherri Sakamoto, Division of Consumer Advocacy
- Phil Nerney, Community Associations Institute Hawaii
- Na Lan, Community Associations Institute
- Shem Lawlor, Hawaii EV Partnership
- Shawn Davenport (Representing Todd Ritter, Hawaii EV Partnership)
- McKibben Mist, Building Industry Association of Hawaii
- Michael Colon, Hawaiian Electric Company

**Other attendees**

- Gregg Kinkley, Deputy Attorney General
- Jo Ann Uchida, Department of Commerce and Consumer Affairs
- Benedyne Stone, Department of Commerce and Consumer Affairs
- Matt Prellberg, Legislative Reference Bureau
- Carlos Perez, Hawaiian Electric
- Jimmy Yao, Hawaiian Electric
- Mark Yamamoto, Hawaiian Electric
- Eric Shimono, Hawaiian Electric
- Dean Pang, City & County of Honolulu
- Chris Yunker, Hawaii State Energy Office
- Lynda Viray, Hawaii State Energy Office
- Margaret Larson, Hawaii State Energy Office
- Rod Arikaki,
- Kent Fukuhara, A-1 A-Lectrician, Inc.

**Call to order. Welcome and Introduction**

The third meeting of the Act 164 Working Group convened at 9am on November 16, 2015 in conference room 600 of the State Office Tower. The meeting agenda, a list of Working Group members, and a copy of the legislation were handed out. The Working Group meeting was open to the public and several non-Working Group members attended. Mr. Mark Glick, Administrator of the Hawaii State Energy Office (HSEO) led the meeting per the October 1st meeting's delegation by Mr. Luis Salaveria, Director, DBEDT. Mark Glick, HSEO opened the meeting with Working Group member introductions. Mr. Glick then highlighted the Working Group goals, revised proposed timeline/schedule and general remarks on conduct and goals of the meeting.

**October 28 Meeting: Requested Follow up**

Chris Yunker, Energy Systems and Planning Program Manager, HSEO summarized key findings from the October 28th meeting, posted to the HSEO website, <http://energy.hawaii.gov/testbeds-initiatives/ev-ready-program/laws-incentives>.

The following topics were discussed at the Oct 28th Working Group meeting:

- *Utility Sub metering*- HSEO and Hawaiian Electric provided a high level explanation of sub metering, including current 3<sup>rd</sup> party practices and industry standards. It was identified that sub metering can lower the cost of infrastructure and can help resolve billing discrepancies.
- *Hawaii EV Partnership Case Study*- Todd Ritter, Hawaii EV Partnership & EV Structure, presented how energy efficiency retrofits can help to increase electrical capacity needed to install EV charging stations in existing MUDs. A second case study was provided showing how substantial savings can be incurred by incorporating EV charging infrastructure within new construction specs.
- *Existing buildings vs New Buildings*- Working Group members discussed the merits of examining issues and solutions regarding existing MUDs *and* new construction-MUDs. The Working Group identified that Act 164 was intended to address *existing* buildings. Working Group members found there is not an existing need to provide incentives for charging infrastructure in new construction stating EV charging station installations may already be occurring due to market signals- developers receiving demand from EV drivers/ buyers to install EV charging stations.
- *Building Codes*- HSEO walked through the timeline and process for adding new content to the building code.
- *Incentives to support EV charging installations*- The notion of needing funding to ease installation cost challenges was discussed and well received by Working Group members. The concept of increasing the gas tax was ultimately not endorsed by Working Group members. The Working Group discussed what existing funds if any may be available to support charging infrastructure installation in MUDs.
- *Applying Public Benefit Fee*- Members suggested an incentive program using energy efficiency measures to assist with EV charging station installations could support EV charging infrastructure installations in MUDs. It was suggested to look into the Hawaii Public Benefit Fee (PBF) funds which has an estimated of \$30M annual funding.

- *Enabling Legislation*- It was noted that if PBF funding were to be a Working Group recommendation, LRB would need to draft legislation to include a specific articulation that PBF funding could be used for the installation of EV charging stations. It was also discussed that any language should be have a goal to help to enable MUDs and provide policy clarity.
- *Important Nexus: Workplace Charging & MUD charging*- Working Group members noted it is important to design an incentive program broad enough to include applications beyond MUDs, for example to include workplace charging installation projects. Members recognized to solve the MUD issue, you may need workplace charging as well, because the workplace is a likely place to charge when you can't charge at home. Working Group members also highlighted the importance of integrating workplace and public EV charging during non-peak electricity use times to avoid overburdening the State's electric grid, and to match electric charging with renewable energy supply.
- *Proposed program requires flexibility*- The Working Group discussed how an incentive program could accommodate prohibitive issues in existing buildings, noting there are a high number of MUDs that have old or inferior infrastructure, where incentives aren't going to help them. In the Oct 28 meeting the HSEO showed an example flow chart which highlighted the complexities to installing EV charging stations in MUDs. Because there is no one size fits all solution, it is important for a proposed incentive program to have flexibility, with an objective means of determining when a building can't install an EV charging station/ infrastructure.
- *Utility Programs*- Hawaiian Electric Company and industry representatives noted many mainland utilities have EV infrastructure programs, some working in partnerships to demonstrate EV charging infrastructure programs, providing EV TOU rates, developing residential EV procedures, and planning for infrastructure enhancements. Hawaiian Electric noted how similar programs could be rolled out across Hawaii. Working Group members requested that Hawaiian Electric provide further details on utility sponsored programs and sub meters.
- *Extend Working Group*- Members noted if topics relating to EVs and MUDs are raised it may be useful to have a Working Group for discussion purposes.

#### Condominium Mediation Program

Mr. Glick noted another source of funding (mediation funds for Condo associations- designed for disputes between owners and a Condo boards) was suggested as a possible funding source following the Oct. 28th Working Group meeting. Working Group members noted the mediation funds could potentially be used towards EV matters particularly if a dispute regarding EV charging installations at an MUD occurred however the intent of the program is not intended to pay for EV charging infrastructure itself. Although the program is not designed for infrastructure, there may be excess funds that might be redirected if the legislature chose to. The amount that is being assessed and is likely turning out more than what will be used in the program. Funding collected is \$1.50 per unit. A report/ budget accounting for the total amount of funding currently available in this fund has not been published. It was noted by Working Group members the program utilization is not that high, yet. Unused funds will be placed into a real estate commission fund. Due to lack of information regarding the program, available funding, etc. the issue was deferred by Working Group members.

Senate Bill 1316 Relating to Electric Vehicles

At the Oct 29<sup>th</sup> meeting, Working Group Members requested that HSEO examine the issues identified during 2015 legislative session (pertaining to SB 1316, which led to the establishment of the Act 164 EV Working Group), to ensure Working Group recommendations and proposals avoid missteps of previous legislation.

"§421I- Electric vehicle charging system installation requests; board of directors approval or approval with reasonable restrictions. (a) Within sixty days of receipt of a shareholder's complete request for approval to install an electric vehicle charging system, the board of directors shall make a decision to approve, or approve with reasonable restrictions, the shareholder's request. The shareholder's request shall not be deemed complete unless information on the cost and impact of the installation is included with the request. To ensure comprehensive and accurate cost and impact of installation, the board should consider: (1) Supporting documentation on the current transformer load capacity; and (2) A current energy audit to ascertain if the electrical system to which the electric vehicle charging station will be connected is capable of handling the increased demands of the system in addition to the current demands of the system...

HSEO acknowledged some of the issues identified in SB 1316 testimonies and committee reports.

- language contradicts current EV MUD law
- language lacks definitions
- vague & ambiguous language may lead to disputes between MUD and EV driver
- financial liability/ obligation / equity / fairness
- 60 day time limit on the approval process contained "no back up of enforcement."
- language not applicable to the Declarations, Covenants and Restrictions of PCAs under 421J, and contradictory requirements that would leave PCAs open and subject to become involved in unnecessary litigation

Discussion on Findings from October 28<sup>th</sup> Meeting

Utility Programs

At the October 28<sup>th</sup> meeting, Working Group members requested clarity on what a utility sponsored program for EV charging infrastructure deployment could look like, and how it could help to expand EV infrastructure funding options. Hawaiian Electric presented how utilities could assist in supporting EV installation deployment and provided 12 points which could be incorporated into proposed recommendation language. Michael Colon, HECO noted the information provided (Nov 16 meeting) contains preliminary language and is for discussion purposes only. HECO also noted proposed language that would impact electric utilities should invariably involve Kauai Island Utility Cooperative. Mr. Colon reiterated the need for a "high-level goal," such as an EV RPS, based on principles of energy efficiency, reduced use of fossil fuel, improved economics, greater grid interoperability, etc. A high level goal could enable the PUC and CA to help determine that recovery of such expenses (EV charging infrastructure) are in the public interest.

In California utility pilot projects, reviewed by the CPUC, facilitate both MUD and workplace EV charging while providing ratepayer benefits of demand response and load shifting. These programs have varying degrees of coverage regarding infrastructure and equipment installation. For discussion purposes,

Hawaiian Electric is interested in electric utilities to be allowed to recover for costs to make existing buildings “EV Ready” including install, operate, maintain, own, and rate-base electric vehicle charging infrastructure up to but not including the EV service equipment. This will include electrical infrastructure required in order to interconnect and provide electric service to electric vehicle service equipment, including transformers, utility services and meters, panels, interconnection equipment, including conduits and wiring, and associated infrastructure.

*Working Group discussion regarding utility programs and Hawaiian Electric proposed language*

Working Group members stated the current scope and language is too narrow, making it hard to state, for example; “spreading the cost to rate payers would be in the public interest” without there being a greater finding relating to non-fossil fuel/ clean transportation. Working Group members found if the legislature determined that it is in the public’s interest to have some greater electrification of transportation or greater movement away from traditional fossil fuel for transportation, then this may be something that could be supported, otherwise it’s a challenge to suggest that it’s in ratepayer interest to take on these kind of costs. Members voiced concerns regarding how a utility program may impact a private electrician’s traditional work. Members also voiced concern regarding cost shifting and noted concern regarding where the cost recovery would come from. Members noted there is a need for further exploration of these issues such as highlighting the costs and benefits of these issues.

Chris Yunker, HSEO provided clarification noting the intent was to provide principles at a high level that could potentially be provided as a recommendation to the legislature, and that any proposed program would still be subject to a PUC proceeding. Mr. Yunker noted recommendations are not meant to supplant the PUC process. Mr. Yunker pointed out it’s important to specify and define the public interest. Hawaiian Electric reiterated some potential benefits include, load shifting, aggregating load by utilizing EVs in aggregate form to offset curtailed renewables. Mr. Colon also reiterated without an overarching goal it’s difficult to justify the cost shift. Working Group members suggested the topic is beyond the prevue of the Working Group, and if the legislature believes this is a policy that has value, then the legislature could create an overarching policy and then the utility might be able to include these types of costs as a traditional utility facility infrastructure asset.

Working Group members suggested to defer the Hawaiian Electric proposed language and instead develop replacement high level language which could specify a general reference to the need for further examination and discussion of these issues with respect to transforming the transportation sector and include whether there are additional methodologies to encourage that transformation. The Working Group found such language should also note that the Working Group was supportive of the concept of EV charging equipment materials design to be possibly recovered, yet determined numerous elements that would need to be discussed.

*Public Benefit Fee*

At the October 28th meeting, the Working Group found that funding to support the deployment of EV charging infrastructure in MUDs is needed, and identified the Public Benefit Fee (PBF) may be a viable source of existing funding. Working Group members requested further clarity regarding the PBF including sample legislative language.

HSEO reviewed the Hawaii Energy contract, publically available online and highlighted where EVs are identified in the contract. Hawaii Energy's current focus on EVs includes; 1) A program to develop and distribute energy-saving kits for EV purchases. The saving kits help spread education of the energy efficiency offset options to balance EV consumption. 2) The program will continue to support various DBEDT and Blue Planet-sponsored EV awareness activities to include participation in EV Partnership meetings, outreach events and providing information as well as other promotional items. 3) The program launched an EV pricing behavior evaluation pilot with private charging stations, as a means to demonstrate how increasing daytime charging of EVs can be a means to utilize PV capacity.

Legislative Reference Bureau: Proposed legislation

The Legislative Reference Bureau is tasked to assist in drafting the Working Group final report and preparing any proposed legislation. Based on the Working Group findings, LRB developed draft legislation that would allow the PBF monies to be used towards EV infrastructure. Working Group members acknowledged clear legislation could help accelerate the process by avoiding time consuming dockets, (to determine whether or not funds could be used). Members noted it's helpful for the Commission to have legislation to point to and suggests, for example this is an appropriate use of funds as deemed by the legislature.

The LRB developed and presented three initial legislative options/ draft legislation. Each options amends Sections 269-121 Subsection B of Hawaii Revised Statues which explains what the PBF monies can be used for. The LRB draft legislation allows for EV infrastructure to be within the PBF performance and utilized as such. The budget and level of funding is not included in the draft legislation.

Working Group members recognized the current PBF law, as written and defined could be argued that EV upgrades, such as installing the charging stations, could technically fall under the current PBF definition. The LRB noted, in an effort for clarity, it is legislative drafting best practice to specifically articulate intent and ensure a specific level of detail is included in the legislation. The LRB noted that PBF legislative history includes reference to the term "green infrastructure". In the event that an existing building/MUD requires electric infrastructure upgrades to support EV charging stations, it's important to be clear that green infrastructure (or promoting clean energy technology) is meeting its intended use, in order to potentially avoid argument, lawsuits or prevention of infrastructure upgrades.

The Working Group noted any proposed legislation should include a preamble which states the intent of the program, and that only existing PBF funds would be utilized. Working Group members voiced concern that Hawaii Energy may not have enough funds to cover these additional potential improvements and may have to request an increase in the PBF surcharge (currently at 1.5%). Members also noted it would be difficult for the Working Group to evaluate whether or not there are adequate funds available, and clarified the intent is that no additional collections would be increased per this particular requirement, and an EV MUD project would be covered within existing funding. Working Group members requested to include language noting a preference/requirement for leveraging the funds, pointing out there shouldn't be an expectation that PBF or government would be covering all expenses. Members pointed out leveraging could support the notion that not all rate payers are going

to be benefiting from the monies that all rate payers put into this fund. Working Group also members discussed potential funding program criteria examples (i.e., funding grant/stipend percentage, proposals/solicitation) and determined it's difficult to build criteria at this stage. Members also noted Hawaii Energy's success when designing programs around an identified program goal. Working Group members noted the PBF administrator solicitation is being developed now.

**Further discussion and/or Vote on Findings from Oct 28<sup>th</sup> Meeting**

Working Group discussed the following *findings and recommendations* from the October 28<sup>th</sup> meeting and determined edits and/or recommendations going forward.

1. *Flexibility. Working Group finds that each EV charging installation within an existing building is a case by case scenario, often associated with complicated issues and challenges which require flexibility in addressing installation solutions- Working Group Supported*
  
2. *Incentives. Working Group finds there is a need for funding to support the deployment of EV charging infrastructure- Working Group Supported*

*Working Group finds the Public Benefits Fee is a viable existing source of funding and suggested legislative language has been devised to incorporate its use for this purpose, within its existing fee structure. Working Group Supported*

3. *Working Group finds any legislation introduced should be legally defensible and any language introduced should be written so that it can be supported by MUD boards from a legislative requirement standpoint. - Working Group proposes to amend this recommendation with edits. Recommends including language relating to statewide education campaign.*

The Working Group determined as Finding #1 suggests EV MUD installation challenges do not fit within a one size fits all solution. The Working Group finds supporting an incentive approach rather than mandate approach. The recommendation (Note finding #2, incentives) could be made effective based on utilization of the EV driver and/or MUD. It will likely be the MUD owner/EV driver's responsibility to take a leadership role in approaching their MUD, identifying steps and consultants/ contractors/electricians required to install a charging station. Likewise it may also be the EV driver's responsibility to inform their MUD that such incentives are available. The Working Group discussed the need for outreach and education to assist in socializing the incentives/ program. It was recommended to include a section in the report that identifies seeking the assistance of applicable trade groups including CAI and HADA and nonprofit organizations including Blue Planet and Honolulu Clean Cities to help educate their members regarding the available program and encourage members to participate. Working Group members stressed the importance of identifying this is a statewide issue and solutions will be distributed statewide.



4. *Working Group finds a utility sponsored program for EV charging infrastructure deployment could also expand options for funding for EV infrastructure Working Group Proposes Edits/Rewrite*

Working Group members noted although the Working Group is largely about MUDs, it is important to recognize in order to solve the EV infrastructure issue all options should be considered holistically and a broad examination is needed.

Replacement language was suggested:

Hawaii supports sustainable transportation consistent with current statute, Act 38 (15) §226-18, (Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawaii's dependence on imported fuels for electrical generation and ground transportation) and

>> therefore utility programs is one means by which could potentially address the barriers however further exploration and consideration should be done to make sure that any program is meeting the public interest, or

>> therefore the utility has potentially the ability to solve some of these issues with a program, however this needs to be more fully explored and fleshed out.

Working Group members were adverse in recommending the utility "to do everything". It was also noted that utility programs are merely one tool by which solutions can be applied.

5. *Working Group finds utilities should consider the deployment of utility sub meters as a means to encourage EV adoption when appropriate – Support*

Working Group members recognize a utility sub meters deployment is a potential solution and could be beneficial to advancing EV infrastructure in MUDs. This recommendation does not take any flexibility away from the PUC ordering utilities to deploy such programs. Hawaiian Electric pointed out language they developed and would like the Working Group to consider: The use of utility sub metering may help alleviate some of the cost concerns associated with building EV infrastructure, and should be evaluated and implemented by the electric utilities as part of a comprehensive EV program.

6. *Working Group finds it is necessary to add a section to the report that highlights the potential impacts and benefits of EV charging, including the need to match EV charging demand to supply of renewable energy, and utilizing tools such as TOU. The Working Group also finds the report warrants highlighting that the benefits of EV charging to the energy ecosystem as a whole go beyond any one location, such as MUDs, and that workplace and other charging locations should also be explored as a means for furthering EV adoption- Support- Working Group Proposes Edits*

Working Group finds that EV charging at home doesn't always match supply of renewable energy, and utilizing TOU. The Working Group agreed incentivizing workplace charging with is wise because workplace charging generally takes place during the daytime when solar



production is at its peak. Working Group recognized the importance to not exclude MUDs, which may inadvertently exclude people from adopting EVs. There may be drivers who charge their EV during day at the MUD day, perhaps taking advantage of public transportation, or work at night.

7. *Working Group finds that market forces, future building codes and customer demands are adequate to address EV installations in new MUD construction- Support*
8. *Working Group finds that the Working Group should be extended- allow to sunset in original legislation. Working Group will not address extending the working group in the report*
9. *Other/ New Recommendations- No other recommendations*

### **Adjourn**

Mr. Glick noted a follow up meeting to vote on the final report would be arranged for December. Mr. Glick adjourned the meeting at 11:26 PM.