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DEPARTMENT OF RESEARCH AND DEVELOPMENT

ENERGY ADVISORY COMMISSION

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Energy Advisory Commission
Friday, October 31, 2008
North Hawai'i Education and Research Center
45-539 Plumeria Street
Honoka`a, Hawai'i

MINUTES

Commission Members:

Present: Steven Burns, Jacqui Hoover, Michael Kramer and Riley Smith

Excused: Richard Ha and Jane Testa

R&D Staff: Diane Ley, Molly Lugo (Corporation Counsel), Marcia Yoshiyama and Douglas Zang

1. Call to Order

The meeting was called to order at 9:10 a.m. by Chair, Jacqui Hoover.

2. Welcome, Introductions, Review of Agenda

a. Review of Agenda

There were no comments on the agenda as presented.

3. Statements from the Public

No one from the public was in attendance.

4. Approval of Minutes – October 21, 2008

No minutes were submitted. Approval of Minutes, October 21, 2008, was deferred to next meeting.

Discussion: J. Hoover requested that the minutes of September 9, 2008, be amended to reflect her statement that Hawaii Leeward Planning Conference (HLPC) is offering the Commission members to attend the Hawaii Energy Challenge 2008 under the Government rate. HLPC did not offer to pay for the Commissioners to attend.

5. Discussion and Possible Action on Committee Recommendations

a. Committee: Water Supply/Use/Other

Copies of the Department of Research and Development, Energy Advisory Commission, Water Supply / Use Committee – Draft Report, were distributed. (See Exhibit A) The recommendations had been divided into three categories: 1) Municipal Water System/Department of Water Supply, 2) Private Water Systems/PUC Regulated and 3) Private Water Systems/non PUC Regulated (Individual catchments systems).

R. Smith reported that he followed the order of discussion in the County's Energy Sustainability Plan. His recommendations to the County include:

- add additional transmission main metering equipment,
- automated meter reading equipment,
- additional permalog leak detectors,
- photo voltaic power systems at pump stations,
- promote current conservation policies, (incorporate an inverted pricing structure to penalize excessive usage by imposing higher rates for excessive water usage),
- develop high level aquifer/water sources, utilize in-line generators and distribute water to customers at lower elevations,
- rainwater harvesting,
- water reuse/dual water systems

M. Kramer asked how can the Commission help with suggesting incentives for public use of water. Is it possible to encourage a policy to actively promote conservation, the use of low flow faucets and protection for residential leaks?

R. Smith replied that the Department of Water Supply (DWS) has a conservation manager and he will check with her to see what kind of public conservation education effort are being done.

M. Kramer asked about micro-turbines being put in on the Kona side of the Island. He asked if there has been a cost-benefit analysis on savings and if the Commission should encourage DWS to install more micro-turbines?

R. Smith responded that there are currently two working on the Kona side of the island. Water is being taken from Waimea and sent down to Kohala. The Department is considering one more possible facility. There are a limited number of places where micro-turbines could work based on the need to maintain pressure and elevation of reservoirs relative to customers.

S. Burns suggested that DWS together with HELCO investigate the potential for pumped storage hydropower as one strategy for "smoothing out" the irregular production of non-firm renewable (like wind and solar) to the grid. He noted that there could be benefits for both DWS and HELCO.

R. Smith replied that the DWS would not be receptive to this because of the EPA has strict drinking water issues. Water quality could not be controlled with a large open reservoir. Possibly the Department of Agriculture could be receptive to water like this used for agricultural purposes.

J. Hoover stated that the commission should think about S. Burns' recommendation as worthy for the County to comprehensively consider. Our recommendations are to the Mayor and the Mayor would decide which recommendations to submit and to what department, even though we recognize the concerns of DWS.

M. Kramer stated that the Commission needs to encourage the Mayor to explore the feasibility of such a reservoir even if not of interest to DWS – would there be interest at the county or state level?

There have been successful pumped hydro efforts like R. Ha's farm and on the Parker Ranch. R. Smith noted that the person making the money with such an initiative needs to be the proponent.

M. Kramer asked if R. Smith would include in his recommendation the use of water saving appliances, such as low flow shower heads and energy efficient washer/dryers. There would be a need to help consumers buy these energy efficient appliances, through point-of-sale incentives administered through a public benefit fund.

S. Burns asked if DWS, like the electrical utility, looks at both demand side and supply side, since sometimes, demand side measures are more cost effective than new capacity. He asked if Tom Goya at the DWS has looked into this?

M. Kramer asked if there is a way to penalize high water users by tacking a fee to their bill in the form of an inverted pricing structure and in turn using the fee to create a public benefit fund for efficient appliances.

J. Hoover replied that should be put in as a general recommendation and will be address later.

R. Smith responded that DWS can monitor how much water is being used but does not have the resources to deal with demand side management measures or educate the public in this regard.

D. Ley noted that education efforts might overlap into some of the other committee's areas. She noted that the Kohala Center has a contract with R&D to support education on energy efficient appliances.

R. Smith noted that it would be more effective to work on programs through the Building Division that could encourage efficient appliances and water conservation rather than push DWS to promote such programs.

b. Committee: Transportation/Biofuels

No documentation has been submitted for review. R. Smith will contact this Committee's chair to remind him to submit his report/recommendations to M. Yoshiyama to distribute at next meeting.

c. Committee: Building

Copies of the Hawaii Energy Advisory Commission Building Subcommittee, Final Policy Recommendations For Commission Approval, were distributed. (Exhibit B) There are eight recommendations: 1) Adopt the IECC- 2006 Model Energy Code, 2) Require developers to provide new homes with RESNET Energystar Home Energy Rating System (HERS) rating, 3) Adopt ASHRAE/IESNA 90.1-2004 as

the basis of the commercial energy code, 4) Require appliance retailers to include Energy Star models for all appliance types in their inventory, 5) Reduce permitting fees by 50%, 6) Prohibit the sale of incandescent lightbulbs in Hawaii County, 7) Fund Green Building Officer position within Building Department and 8) Fund Energy Policy Coordinator position.

M. Kramer recommended a few changes to the International Energy Conservation Code (IECC); 1A – 1J. Specifically, he noted that an insulation level of only R-19 would be appropriate for air conditioned homes here in Hawaii since we don't need insulation to conserve heat as mainland properties do.

J. Hoover asked if M. Kramer's recommendation to incorporate IECC – 2006 with amendments is applicable to new construction only? She stated that the new state legislation about solar water heaters required them for all new structures including renovations, our recommendations need to be as clear as possible.

M. Kramer replied that per his meeting with Brian Kajikawa, Building Division Head, the code would apply if renovation exceeded a certain percentage of the house's area. R. Smith noted that if a building permit was pulled (for plumbing, electrical, structural, etc.) then the code would apply. He noted that if IECC becomes part of the County's code, then the lawmakers would need to put a language covering what percentage would require the new code to kick in.

M. Kramer noted that air conditioner efficiencies he proposed is significantly higher than the rating of IECC, but technology has changed rapidly in air conditioners. Also, the provision to ban incandescent bulbs would be contentious, through other countries have done it and it is being discussed at the State and Federal levels.

d. Committee: Utilities

J. Hoover reported that she will recommend to the County of Hawai'i to work closely with the State to have the best possible outcome with the implementation of the Hawai'i Clean Energy Initiative. The Governor's agreement with the utilities was the focus of the discussion that followed.

S. Burns noted that the agreement shows commitment on the part of the utilities. The Public Utilities Commission (PUC) is appointed by the governor. He stated that right now the Integrated Resource Planning process (IRP) covers all representation from the Big Island. With the implementation of the new HCEI agreement, the IRP process will be changed to "Comprehensive Energy Scenario Planning" which will be statewide.

J. Hoover asked if the Commission should advocate for a process like the IRP where we can be certain that the Big Island's specific concerns are not diluted by those from the rest of the state.

S. Burns responded that to the extent of local representation can be kept, this would be very important.

D. Zang added that the Big Island is still isolated, there will be an emphasis on combining grids.

S. Burns replied that keep the utility strong and viable, in the process of that occurring, you have a great push on efficiency and renewables to reach the 70% goal by 2030. The Big Island already has a 39% renewable energy use. Other island are benefiting because they are grouping all of the utilities together and looking at the Hawaii State as a whole not each island separately.

M. Kramer asked if the utilities plan doesn't call for a specific renewable percent and we should be more specific than that.

J. Hoover responded that HCEI already calls for a certain percent but until we improve the grids, we're maxed out.

M. Kramer asked if we are going to address for new development that there is provision to allow the developer to distribute power.

J. Hoover responded that the PUC is not allowing public facilities to transfer power to other public facilities. She stated that Mauna Lani cogeneration plant and NELHA has tried "inside the fence generation". We need to advocate to the PUC for support of such efforts.

M. Kramer asked if a comprehensive analysis is needed of the financial effects of solar energy rebates discussed in Item 8, section 4.1 of the Utilities report.

J. Hoover responded that there is a need to determine cost-benefits.

M. Kramer suggested J. Hoover look at the City of Berkeley program as an example.

J. Hoover said that she will review and assess the Berkeley initiatives as an example and will not limit her efforts only to the program from the City of Berkeley.

R. Smith asked J. Hoover to attach the example to her report so that everyone can understand.

e. Committee: Planning

S. Burns noted that there have been no real changes yet to his content, but he hoped to have more finished by the next meeting. He conferred with Brad Kurokawa, Building Division, and didn't have a lot of additions from his input. The County is pursuing some initiatives through the Community Development Plan (CDP).

J. Hoover noted that there are some collaborative opportunities through long term planning.

Planning will be discussed at length during the next meeting.

6. Department of Research and Development's Update

Copies of the Department of Research and Development's Report to the Energy Advisory Commission, dated October 22, 2008 – October 31, 2008, were distributed. (See Exhibit C)

D. Zang reported that the PUC (Public Utilities Commission) has granted the utilities and respondents a 60-day extension to collect information for the Wheeling Docket.

The bill to adopt the IECC will be going to the County Council for approval.

7. Unfinished Business

None.

8. New Business

None.

9. Other Business

a. Set Date and Time of the Next Meeting

The next two meetings will be held at North Hawaii Education and Research Center on the following dates and times:

- November 6, 2008, 9:00 a.m.
- November 14, 2008, 9:00 a.m.

b. Set Agenda for the Next Meeting

Recommendation and decision on possible actions.

c. Announcements

None.

10. Adjournment

Motion: R. Smith made a motion to adjourn the meeting. The motion was seconded by S. Burns and carried unanimously.

The meeting was adjourned at 12:39 p.m.

Respectfully submitted,

Marcia Yoshiyama
Administrative Services Assistant

Attachments:

Exhibit A – Department of Research and Development, Energy Advisory Commission, Water Supply / Use Committee – Draft Report

Exhibit B – Hawaii Energy Advisory Commission, Building Subcommittee, Final Policy Recommendations For Commission Approval, October 31, 2008

Exhibit C –

Exhibit D – Department of Research and Development Energy Program Activities,
October 22 – October 31, 2008