Hawaiian Electric Company
Maui Electric Company
Hawaii Electric Light Company

Energy Agreement Among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce & Consumer Affairs, and Hawaiian Electric Companies

Summary of Key Agreements

Signatories: The Governor of the State of Hawaii; the State of Hawaii Department of Business, Economic Development and Tourism; the State of Hawaii Consumer Advocate; and the Hawaiian Electric companies.

All parties believe that the future of Hawaii requires that we move decisively and irreversibly away from imported fossil fuel for electricity and transportation and towards locally produced renewable energy and an ethic of energy efficiency.

Successfully developing Hawaii's energy economy will make the State a global model for achieving a sustainable, clean, flexible, and economically vibrant and independent energy future. Utilizing state-of-the-art technology, we can expand Hawaii's renewable energy portfolio and empower customers with more choices to manage their energy use.

We commit to being open and truthful with our community about the investment necessary to transition to a clean energy future, the importance of making it, and the time it will take to be successful. We accept that the transition to this clean energy future will require significant public and private investment with impacts on Hawaii's ratepayers and taxpayers, and we expect to achieve long-term benefits that outweigh the costs.

As we move from central-station, oil-based power to a much more renewable, distributed and intermittent-powered system, we recognize the need to assure that Hawaii preserves a stable electric grid and minimizes disruption to service quality and reliability. In addition, we recognize the need for a financially sound electric utility.

Finally, we commit to a system of regulation that will transform our major utility from a traditional sales-based company to an energy-services provider that retains its obligation to serve the public with reliable energy, strives to source and integrate greener and lower-cost generation, and moves us to a more independent future.

Renewable Energy Commitments

All parties commit to accelerate the addition of new, clean energy resources on all islands. With the parties support, Hawaiian Electric companies commit to pursue and integrate as much as an additional 1,000 MW of renewable energy resources on Oahu including approximately 400 MW of wind power from Lanai or Molokai; 60 MW on the Island of Hawaii (Big Island); and 50 MW on Maui. This includes the attached list of nearer term renewable energy commitments.

Hawaiian Electric will work to streamline power purchase agreements for these projects which must still be approved by the Public Utilities Commission.

Hawaiian Electric agrees the move to biofuels is not intended to slow the implementation of existing or future non-fuel renewable energy projects.

As Hawaii transitions to a renewable energy future, Hawaiian Electric utilities will retire existing less efficient fossil-fired units by removing such units from normal daily operating service as expeditiously as possible without compromising service reliability.

Renewable Portfolio Standard

All parties agree that a Renewable Portfolio Standard (RPS) is an effective structure for the Hawaiian Electric companies' obligation to add renewable energy. Therefore, the parties agree to seek legislative changes to the existing RPS as follows:

- RPS goals will be increased to 25% (from 20%) by 2020 and 40% by 2030. However, through 2015 no more than one-third of the companies' total RPS may come from imported biofuels used in utility-owned units. All grid-connected renewable energy generation, both central-station and distributed, shall count towards the RPS goal.
- Energy savings from energy efficiency, demand response, and renewable displacement shall NOT count toward RPS goals after 2014 but shall be fully counted toward achievement of HCEI goals.

'Big Wind'

Wind power is abundant on the Neighbor Islands with a combined potential across the State thought to be in excess of 1,000 MW, including only about 100 MW on Oahu.

The Hawaiian Electric companies commit to expeditiously integrate, with the assistance of the State, up to 400 MW of wind power into the Oahu electrical system from one or more wind farms on Lanai or Molokai and transmitted to Oahu via undersea cable systems. Therefore:

- Developers of Big Wind projects will be responsible for matters related to implementation of their wind farm facilities, including permitting, direct infrastructure and requirements to meet performance standards such as energy storage.
- The State, in coordination with developers, contractors, and/or Hawaiian Electric, will be responsible for siting and permitting the undersea cable system. The State, with Hawaiian Electric and/or developers' reasonable assistance, shall seek federal

grant or loan assistance to pay for the undersea cable systems. If needed, additional funding for the cable system will be provided through a prudent combination of taxpayer and ratepayer funding.
- Hawaiian Electric will be responsible for funding, constructing, operating and maintaining all land-based connections and infrastructure up to the interconnection point with the State-owned undersea cable systems.

Decoupling revenues from sales

All parties agree that transition to Hawaii's clean energy future requires that the Hawaiian Electric utilities should no longer be compensated under a model which inherently encourages increased electricity usage. Decoupling is a regulatory mechanism that de-links the utilities' revenues and profits from electricity sales. This decoupling of revenues from sales will remove barriers for the utilities to pursue aggressive demand-response, load management and customer-owned or third-party owned renewable energy systems while giving the utilities an opportunity to achieve fair rates of return.

Therefore, subject to the approval of the Public Utilities Commission, revenues of the utility will be fully decoupled from sales beginning with the interim decision by the Commission in the 2009 Hawaiian Electric Company rate case (most likely in the summer of 2009). Thereafter, rates will be based upon a system using independent measures to track the cost of providing electric service, with careful monitoring to assure ratepayer funds are properly spent. This includes:
- The current cost of operating the utility deemed reasonable and approved by the Commission.
- Return on and return of ongoing capital investment.
- Changes in State or federal taxes.

The Commission may review the decoupling mechanism at any time and may unilaterally discontinue it upon determination that it is not operating in the interests of ratepayers. The Consumer Advocate or the utilities may also request a review of the impact of the decoupling mechanism.

Feed-in tariffs

All parties agree that feed-in tariffs will encourage development of renewable energy. A feed-in-tariff is set of standardized, published purchased power rates, including terms and conditions, which the utility will pay for each type of renewable energy resource based on project size fed to the grid. This provides developers with certainty of the amount of payment and how much renewable energy the utility will acquire. Therefore:
- All parties agree that feed-in tariffs should cover the renewable developer's cost of energy production plus a reasonable profit.
- All parties will request that the Commission adopt feed-in tariffs by July, 2009.

Net Energy Metering

All parties agree there should be no system-wide caps on net energy metering. Instead, all distributed generation (DG) interconnections should be limited on a per-circuit basis to no more than 15% of peak circuit demand.

New DG requests shall be processed and interconnected on a first-come, first-served basis unless the Commission specifies some other method.

NEM currently provides an interim method to encourage the installation of renewable energy generated from customer-sited systems by paying a credit at full retail value for excess electricity exported to the grid. All parties agree that NEM will be replaced with an appropriate feed-in tariff when Advanced Metering Infrastructure and time-of-use rates (see below) are available.

Energy Efficiency Portfolio Standard

All parties agree to support the development of an Energy Efficiency Portfolio Standard (EEPS) for the State of Hawaii. The parties also agree to support the achievement of the goals established in the EEPS.

Greening Transportation

To reach the ambitious goal of 70% clean, renewable energy for electricity and transportation by 2030, a significant shift is essential in the way we travel around Hawaii, and especially Oahu.

A key action is to aggressively support alternative fuel vehicles. The most promising alternative fuel today is electricity. Electrification of transportation can offer consumers a low-cost alternative to gasoline and decrease greenhouse gas emissions from transportation dramatically, while only slightly increasing emissions from the power sector.

All parties agree to encourage adoption of 'gas-optional' electric vehicles (hybrids, plug-in hybrids, pure electric vehicles) through a variety of incentives. And all agree to lead by example and help develop a market by becoming early adopters of electric vehicles for their fleets.

Lifeline Rates

All parties agree that the Hawaiian Electric companies and the Consumer Advocate shall investigate and submit to the Commission by April 2009 a proposal to establish "lifeline rates" designed to provide a rate cap for those on low or fixed incomes who are unable to pay the full cost of electricity.

'Pay as You Save' Solar Water Heating

All parties agree that by the end of 2008, the Hawaiian Electric companies will propose to the Commission a full "pay as you save" program with a goal of 2,500 annual installations, expanding the current pilot SolarSaver program. Under this program, a ratepayer (whether property owner or renter) can request a solar water heating system; the utility

will pay for the unit installed by a licensed solar contractor; and the investment will be repaid through shared savings on the ratepayer's bill. Once the cost of the unit is repaid, savings accrue entirely to the ratepayer.

Photovoltaic Host Program

All parties agree that the Hawaiian Electric companies shall, by March 2009, submit to the Commission a proposal for a "Photovoltaic (PV) Host Program."

Under this program, the Hawaiian Electric companies will contract to use customers' sites, either commercial or residential, to install PV systems. As consideration, a site owner may receive a rental payment and/or use a portion of the energy generated. The PV system may be owned by the utility, the site owner or a third party.

Such PV systems can be targeted toward customers, such as the Department of Education facilities and other State buildings and properties.

Advanced Metering Infrastructure

All parties agree that Hawaiian Electric will apply to the Commission by November 30, 2008, for immediate approval to begin installing, on a first-come, first-served basis, advanced meters for all customers who request them, and request expedited approval to fully implement interim time-of-use rates for those customers.

By December 31, 2008, Hawaiian Electric will file a full application to install advanced meters to remaining customers and the communication and meter data management systems to give customers greater control of their electricity use.

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Renewable Energy Commitments[1] :

Hawaiian Electric Company, Inc. (Oahu)

- RFP (Competitive Bid for Non-firm Renewable Energy) (100 MW)
- Wind (30 MW), North Shore
- Wind (400 MW) Molokai and/or Lanai
- Honua waste-to-energy (6 MW), Campbell Industrial Park (CIP)
- C&C waste-to-energy (21 MW)
- Sea Solar ocean thermal (25 to 100 MW), Kahe Point
- Lockheed Martin ocean thermal (10 MW), Kahe Point
- Simple cycle biofueled CT-1 (110 MW), CIP (under construction)
- Distributed Generation (DG) biofueled (8 MW), Honolulu International Airport
- DG biofueled (30 MW) various substations
- Simple cycle biofueled CT-2 (100 MW), CIP
- DG mixed renewables (100 MW), on military property
- Future RFP (Competitive Bid for Renewable Energy) Additional and Replacement Power (MW TBD)

Maui Electric Company, Ltd. (Maui County)

- Shell Wind (21 MW) Ulupalakua
- Lanai Renewable Resources solar (1.2 MW)
- Pulehu (6 MW) Biomass
- Oceanlinx wave energy demonstration (2.7 MW)
- Landfill Gas (2 MW)
- Kaheawa Wind Farm, phase two (21 MW) Ma‘alaea
- HC&S biomass contract extension Puunene
- RFP (Competitive Bid for Firm Renewable Energy) additional and replacement Power (MW TBD)

Hawaii Electric Light Company, Inc. (Island of Hawaii)

- Up to 40 MW of firm generation resources, including current possibilities:
  - Puna Geothermal Ventures additional (8 MW)
  - Hamakua Biomass (25 MW) or Hu Honua Biomass (22 MW)
  - Hawaii County waste-to-energy (4 MW)
- Up to 5 MW of variable/intermittent generation resources, including possibilities:
  - Sopogy concentrating solar power (0.5 MW), Kailua-Kona
  - Na Makani wind (4.5 MW) with pumped hydro for “firming” and “smoothing”

[1]Specific near-term projects identified to date