



Testimony to the Senate Committees on
Energy and Environment and Commerce and Consumer Protection
Wednesday, January 14 at 2:00 p.m.
Conference Room 229, State Capitol

RE: Information Briefing to Investigate the Island-Wide Power Outage on O'ahu

Chairs Gabbard and Baker, Vice Chairs English and Ige, and Members of the Committees:

My name is Jim Tollefson and I am the President and CEO of The Chamber of Commerce of Hawaii ("The Chamber"). Thank you for the opportunity to submit comments.

The Chamber is the largest business organization in Hawaii, representing 1,100 businesses, which employ more than 200,000 individuals. Approximately 80% of our members are small businesses with less than 20 employees. The organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

The Chamber of Commerce of Hawaii congratulates the local utility, Hawaiian Electric, for deploying its manpower in the harshest of local weather conditions, to restore power to most of Oahu in about 12 hours. As the eastern and mid-western states can attest, a 12 hour outage is relatively minor compared to the 7 to 10 day outages seen during recent ice storms. While nature is a force that can be planned for, to win 100% of the battles either on the mainland or on an isolated grid such as Hawaii's, would come at an exorbitant cost.

As businesses, members of the Chamber do suffer losses during prolonged outages. Stores and restaurants close. Emergency response teams must be mobilized. Employees (properly) are committed to their families first during these emergencies. Communication is frequently sporadic, preventing businesses from picking up where they left off. These predicaments represent costs to a business.

There are two possible approaches to the solution. The first is to harden up the infrastructure. While HECO builds to accepted utility standards, and has all the safeguards in place to prevent widespread outages, the utility could invest in more robust, and significantly more expensive (and visually intrusive) system upgrades. Would this hardened system withstand a direct hit by a hurricane? We can only wonder.

The second, and perhaps more rational option, is to continue to encourage investment in renewable and alternate energy sources. By diversifying and distributing the source of energy, perhaps the pain of total outage would be reduced. Solar photovoltaic systems would provide some emergency power to help smaller businesses continue to operate under skeleton conditions. Wind power could be harnessed to feed power into the grid, provided the grid can be designed with smart relays to allow for the wind generated

power to be isolated into community "islands", such as what was seen in the community of Honokai Hale before the outage went island-wide. Large arrays on critical loads such as the airports, hospitals, retirement homes and shipping docks can help to keep the lights on and services flowing. Part and parcel to the deployment of renewable energy is to invest in a smart, more responsive distribution grid.

The benefits of what our investment in renewable energy can provide extend well beyond the small protections afforded during emergency outages. Renewable energy will reduce Hawaii's dependence on imported oil, keeping those fossil-fuel dollars circulating on the island rather than being exported offshore.

Finally, support for alternate forms of energy will create hundreds of new jobs as local businesses respond to the locally driven demand to migrate from conventional, fossil fuel plants to innovative new ways of generating and distributing power.

These multiple benefits of renewable energy are nearly impossible to quantify in a regulatory environment that mandates the delivery of lowest cost electricity through Integrated Resource Planning. When compared to lowest cost power supply and demand reduction through energy efficiency and demand side programs, renewable energy can be capital intensive. However, ongoing fuel costs are free and when externalities such as energy security and the retention of dollars in-state, the economics improve dramatically. These factors are not currently used in evaluating energy supply options.

These are some thoughts on how to improve the current system. Thank you for the opportunity to submit comments.