



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

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GOVERNOR

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Statement of  
**RICHARD C. LIM**  
Director  
Department of Business, Economic Development, and Tourism  
before the  
**HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION**

Tuesday, March 19, 2013

8:30 a.m.

State Capitol, Conference Room 325  
in consideration of

**SB 1040**

**RELATING TO ELECTRIC SYSTEMS.**

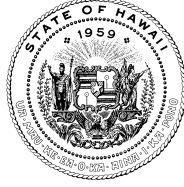
Chair Lee and, Vice Chair Thielen, and Members of the Committee.

The Department of Business, Economic Development & Tourism (DBEDT) supports SB 1040 to establish a policy for the State of Hawaii to support the implementation of advanced grid modernization technology.

Enabling the Public Utilities Commission to consider the value of improving electrical generation, transmission, and distribution systems and infrastructure may facilitate more robust solutions to provide reliable power and enable the grid to accept increased levels of renewable energy.

DBEDT respectfully defers to the Public Utilities Commission on the development and administration of this regulatory measure.

Thank you for the opportunity to offer comments on SB 1040.



NEIL ABERCROMBIE  
GOVERNOR

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LT. GOVERNOR

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**TO THE COMMITTEES ON  
ENERGY & ENVIRONMENTAL PROTECTION  
AND ECONOMIC DEVELOPMENT & BUSINESS**

**THE TWENTY-SEVENTH LEGISLATURE  
REGULAR SESSION OF 2013**

**TUESDAY, MARCH 19, 2013  
8:30 AM**

**TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF  
CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER  
AFFAIRS, TO THE HONORABLE CHRIS LEE AND CLIFT TSUJI, CHAIRS, AND  
MEMBERS OF THE COMMITTEES**

**SENATE BILL NO. 1040 - RELATING TO ELECTRIC SYSTEMS**

**DESCRIPTION:**

This measure proposes to authorize the Public Utilities Commission to consider the value of implementing advanced grid modernization technology in the State.

**POSITION:**

The Division of Consumer Advocacy ("Consumer Advocate") strongly supports this bill.

**COMMENTS:**

In achieving the State's ambitious goals under the Hawaii Clean Energy Initiative, the State's various electric utilities will require the installation of many new pieces of hardware, software, and instrumentation that modernizes and improves the systems

Senate Bill No. 1040  
Senate Committees on Energy & Environmental Protection and  
Senate Committee on Economic Development & Business  
Tuesday, March 19, 2013, 8:30 a.m.  
Page 2

that deliver electric utility service to customers throughout the State. In assistance of that end, Senate Bill No. 1040 proposes to allow the PUC to consider the value that various equipment, facilities, processes, products, and systems will have on improving the reliability, resiliency, flexibility, and/or efficiency of the State's electrical generation and delivery infrastructures affected by the higher and higher contributions of renewable energy resources to the State's various electric utility systems. As noted by the PUC in its testimony to this Committee, Senate Bill No. 1040 clarifies the policy of the State with respect to grid infrastructure improvements and gives the PUC legislative guidance as to its duties and deliberations concerning the implementation of advanced grid modernization technologies throughout the State. As part of the Administration's legislative package for the Twenty-Seventh Legislature of the State of Hawaii, the Consumer Advocate strongly supports the passage of this measure and asks that the Committee approve this bill for consideration by the entire Legislature.

Thank you for this opportunity to testify.

TESTIMONY OF HERMINA MORITA  
CHAIR, PUBLIC UTILITIES COMMISSION  
DEPARTMENT OF BUDGET AND FINANCE  
STATE OF HAWAII  
TO THE  
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

MARCH 19, 2013  
8:30 a.m.

**MEASURE:** S.B. No. 1040  
**TITLE:** Relating to Electric Systems

Chair Lee and Members of the Committee:

**DESCRIPTION:**

S.B. No. 1040 directs the Public Utilities Commission to consider in its deliberations the value of employing advanced grid modernization technology (“AGMT”) to improve and enhance the State’s electrical systems and infrastructure. This bill also defines “advanced grid modernization technology” to encompass a host of current and developing technologies and methods to ensure Hawaii’s grids continue to respond to evolving energy needs.

**POSITION:**

The Commission strongly supports S.B. No. 1040 and would like to offer the following comments.

**COMMENTS:**

S.B. No. 1040 provides valuable legislative guidance and support to the Commission in evaluating the various technologies and methodologies employed by utilities to improve the reliable and efficient operations of Hawaii’s electrical grids. AGMT, when appropriately applied, can provide essential grid support capabilities that can drastically improve grid communications, bolster electric system reliability, and support operational efficiencies. Without such technologies and methodologies, the State may be hindered in developing the infrastructure needed to reach its clean energy mandates. The Hawaii Clean Energy Initiative Road Map for 2011 has recognized this point and has noted that

smart grid technologies, as included within AGMT, are “highly critical” early stage technologies needed to enable the State to meet its Renewable Portfolio Standards requirements.<sup>1</sup>

Thank you for the opportunity to offer comments on this measure.

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<sup>1</sup>See HCEI Road Map 2011; Braccio and Finch, Booz Allen Hamilton, Inc.; prepared by the National Renewable Energy Laboratory of the United State Department of Energy; August 2011; page 8.

# **Testimony before the House Committee On Energy & Environmental Protection**

**By Marc M. Matsuura  
Manager  
Smart Grid Department  
Hawaiian Electric Company, Inc.**

**Tuesday, March 19, 2013  
8:30 a.m.**

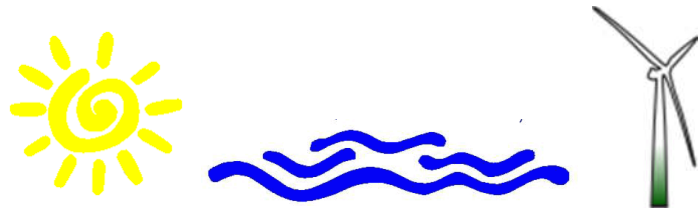
## **SB 1040 – Relating to Electric Systems**

Chair Lee, Vice Chair Thielen, and Members of the Committee:

My name is Marc Matsuura and I am submitting these comments on behalf of the Hawaiian Electric Company and its subsidiaries, Hawaii Electric Light Company and Maui Electric Company, in support of SB 1040. The purpose of the bill is to establish a policy for the State for the implementation of advanced grid modernization technology. We are in support of this measure.

The requirements of Hawaii's island grid systems are changing with the addition of renewable energy resources and new types of electric loads. Many of these changes are occurring at the edge of the grid at customers' homes and on the distribution system in the form of distributed generation and electric vehicles. As the grid evolves, greater information and control will be needed at the locations of these distributed energy resources to manage the grid more efficiently and effectively. In addition, customers are more technologically sophisticated now than in the past and have greater expectations for quality and service. As such, the utilities will need to work towards developing the functional characteristics that improve the operational capability of the Hawaii systems that are mentioned in the bill.

Thank you for the opportunity to testify on this matter.



# LIFE OF THE LAND

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## COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Chris Lee, Chair

Rep. Cynthia Thielen, Vice Chair

## COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS

Rep. Clift Tsuji, Chair

Rep. Gene Ward, Vice Chair

DATE: Tuesday, March 19, 2013

TIME: 8:30 AM

PLACE: Conference Room 325

Re SB 1040 RELATING TO ELECTRIC SYSTEMS

## COMMENTS

Aloha Chairs Lee and Tsuji, Vice Chairs Thielen and Ward and Members of the Committees

My name is Henry Curtis and I am the Executive Director of Life of the Land, Hawai`i's own energy, environmental and community action group advocating for the people and `aina for four decades. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

## **PUC Already Has Authorization**

In oral testimony at the last hearing the PUC stated that this bill was not directing the PUC to approve Smart Grids but was allowing them to investigate Smart Grids.

But the PUC already did that almost five years ago. In 2008 the PUC opened Docket 2008-0303 to examine HECO's proposal for Advanced Meter Infrastructure (AMI). Life of the Land was admitted as a party. The **PUC closed the docket without prejudice**, telling the utility to come back after filing a Smart Grid Roadmap. The utility has not done that, and is instead trying to get piecemeal approval for Smart Grid components.

## **This Legislation is Redundant**

The 2012 Legislature has already authorized this, and the PUC has directed to the utilities to produce a report that is due in June 2013.

The PUC has opened a docket for the HECO Companies Integrated Resource planning (IRP) process whereby HECO, MECO & HELCO must develop short-term (5 –year) and long-term (20-year) plans. The HECO Companies must file the Plan in June. The Commission and the 2012 Legislature has required that the utilities examine 18 Big Ticket items and issues, one of them being the Smart Grid.

HCR 58 HD 1 SD 1 (2012): “BE IT RESOLVED [ ] that the Public Utilities Commission direct that the integrated resource plans of electric utilities examine a strategy that replaces existing fossil fuel-based electricity generation plants with renewable energy resources; [ ] examine a strategy that develops excess firm or intermittent electricity to be transmitted between islands, including plans to develop undersea electricity transmission cables to support transmission of electricity between the islands; [ ] consider the following resources: (1) Electricity generated using geothermal steam on identified geothermal resources to replace or mitigate the use of fossil fuel-based electricity generation facilities; (2) Hydrogen and other available energy storage technologies used as a source of stored energy to stabilize the grid when necessary; and (3) Electricity generated by waste-to-energy facilities to serve as an untapped fuel source; and BE IT FURTHER RESOLVED that the Public Utilities Commission is requested to examine: (1) Its avoided cost calculation methodology; (2) Ways to maximize the use of distributed generation, including an examination of the appropriateness of current circuit penetration threshold levels for the interconnection of distributed generation resources; (3) The increased use of energy efficiency programs and technology to meet the goals of the energy-efficiency portfolio standards under section 269-96, HRS; (4) Ways to minimize the curtailment of renewable energy resources; and (5) Ways to modernize the State's electrical grids”

## **SB 1040 is So Broad it includes Everything**

SB 1040 (2013) states: “The [public utilities] commission [ ] shall consider the value of [ ] advanced grid modernization technology,” where “ ‘Advanced grid modernization technology’ means equipment, facilities, and associated processes that individually or collectively function to improve the reliability, resiliency, flexibility, and efficiency of the Hawaii electric system [ ] including but not limited to [ ] optimization of assets and improving the operational efficiency of the Hawaii electric system.”

This definition is broad enough to include every utility project that every Hawai`i electric utility has ever proposed since the 19<sup>th</sup> century.

## **SB 1040 opens on a false note**

Sentence one of SB 1040 states: “Hawaii's progress toward the widespread use of renewable energy requires modernized electrical infrastructure supported by nimble, robust technology capable of servicing the evolving needs of the grid.”

A dumb grid powered by 100% baseload biofuels and geothermal requires no modernization. It would rely on 100% renewable and indigenous resources. Alternatively, some wind and solar could be added.



## **Smart Grids have Manufactured Support**

The federal government is pouring in billions of dollars to advance smart grids.

Consultants are seeking to cash in, and offer glowing recommendations for the industry that will finance their future.

## **Command and Control**

Perhaps the bill intends to limit the scope to new smart solutions as opposed to past dumb solutions. That is, the focus is on building multiple terrestrial and undersea high-voltage transmission lines, installing two way communication and control systems at the 250,000 electric grid nodes, installing a sophisticated computer system that can monitor the new grid in 1/1000<sup>th</sup> of a second, and provide cyber security to all components.

Smart Grids are a trillion dollar effort to vastly overhaul, centralize, and rigidly control all energy policy.

They require vast proprietary systems, increased cyber security, and far greater complexity. Complex and proprietary command and control systems allow for very limited participatory democracy and taxpayer/ratepayer influence. Instead, the system is friendly to elites and consultants.

## **Upstream and Downstream Smart Meters**

One part of a Smart Grid is a Smart Meter. Smart Meter can provide two-way electronic communication between a utility and a ratepayer.

The Smart Meter can serve as a gatekeeper in one of two ways.

Upstream gatekeeper: all customer supply and demand data is sent upwards to a huge utility-run computer that measures instantaneous changes in electricity demand and supply, and fluctuations in current and anticipated wind and solar generation due to current and forecasted wind speeds and cloud cover. The forecasts will cover the next millisecond, second, minute, hour and day. Vast layers of cyber security systems will be installed. Most of the computer programs needed do not yet exist.

Downstream gatekeeper: Red, yellow and green lights appear on cell phones letting customers know when there is adequate/inadequate energy on the grid. People are able to use apps to turn off systems when demand is high. Each color has a different cost per kWhr to the customer. Sort of like cell phones having cheaper weekend rates.

It is intuitively obvious that experts and utility executives prefer the upstream gatekeeper because that will maximize their financial interests.

But without any economic analysis whatsoever it may turn out to be true or false. The answer may differ based on the island or the type of customer.

For example, many large commercial banks processing billions of dollars in checks believe that a grid offering 99.9999% reliability is not reliable enough, and so they have opted to have installed on-site back-up systems. Some major hospitals in Hawai'i have done just that.

The use of the term "Advanced grid modernization technology" implies that those who favor other solutions are the backwater luddites who oppose progress and oppose the inter-island grid.

**It is interesting that the term "Advanced grid modernization technology" does NOT include any references to community values, lower electric rates, lower environmental impacts, lower cultural impacts, and/or lower greenhouse gas emission impacts.**

### **Smart Grid, Stupid Policy? by Andy Stone. Forbes (Jan 29, 2009)**

"When it comes to upgrading the U.S. power system, spending runs far ahead of understanding. ... Rarely have such high hopes for economic growth been pinned on a concept that so few understand."<sup>1</sup>

### **Why Smart Meters Might Be a Dumb Idea By William J. Kelly (Consumers Digest, January 2011)**

"We interviewed 35 experts, including smart-grid- and utility-industry executives, government regulators and consumer advocates. We also reviewed thousands of pages of government documents, filings with state utility commissions, materials from smart-meter-makers, and reports that were produced by the emerging smart-grid industry. A few experts suggest that smart-meter conversion represents little more than a boondoggle that is being foisted on consumers by the politically influential companies that make the hardware and software that are required for the smart-meter conversion. And based on our investigation, it's difficult to disagree. ...

What's discouraging about the all-but-mandatory dynamics of the smart-meter transition is that it's appealing only if you're willing to pay a lot of money to save a little electricity. ... Consumers will pay for it all through electric bills, taxes and direct purchases. ...

The whole premise of smart-meter benefits relies on getting consumers to pay strict attention to how much electricity that they use and when they use it, smart-meter advocates say. And to make that happen, electric companies seem determined to swing a stick at consumers rather than to dangle a carrot. ...

It's difficult to see how anyone ultimately will stop the advance of smart-meter integration, because everyone who has a stake in it is marching in lockstep to a long-term game plan."<sup>2</sup>

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<sup>1</sup> [http://www.forbes.com/2009/01/29/electricity-infrastructure-obama-business-energy-0129\\_smart\\_grid.html](http://www.forbes.com/2009/01/29/electricity-infrastructure-obama-business-energy-0129_smart_grid.html)

<sup>2</sup> <http://www.consumersdigest.com/special-reports/why-smart-meters-might-be-a-dumb-idea/view-all>

## **The Future of Global Smart Grids: A NEW ENERGY INTERNET?<sup>3</sup>**

We are facing a high-stakes moment for smart grids. Trillions of dollars of private and public sector investment are at stake over the next 20 years. But, the future of smart grids is unclear. Some believe that smart grids will usher in the next Internet boom — democratizing energy management and use. Others imagine the future of electricity grids falling into the hands of a few, powerful, established players that are poised to leverage smart technologies into even greater control over national energy flows. Now is the time for business leaders across a wide array of sectors to question their assumptions. [ ]

A High-Stakes Moment: Smart grids might be the next big thing. If you happen to be an energy security or climate change evangelist, an entrepreneurial technologist, a business executive in the energy sector or simply an investor looking for large returns, it is hard not to notice that smart grids are attracting a lot of attention. [ ]

But, wherever you hear the sound of money rushing in, you can be sure that the hype is not far behind. To be sure, electricity grids themselves do not have a reputation for being the most dynamic of sectors. [ ]

The Official Future: “The Energy Internet” In the official future, the rapid implementation of smart grid technologies will enable an equally swift decentralization of our existing electricity grids, allowing distributed electricity generation and newfound consumer controls with reasonably open access to and management of information and energy. [ ]

An Alternative Future: “Air Traffic Control” Access to and management of energy and information is proprietary and centrally controlled by utilities and large-scale regional or national network operators. Big established electricity players, infrastructure firms and large grid-management technology suppliers call the shots in their respective ecosystems. Overpowered by reliability-impacting events, such as security breaches and large-scale disruptions, government essentially abandons attempts to empower the demand side and to foster distributed energy generation or consumption control. Consumer energy and information flows are steered by these large corporations and government agencies.

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<sup>3</sup> Implications for Corporate, Investment and Innovation Strategies Across Industry Sectors

By Olaf Groth, Jesse Goldhammer and Doug Randall

[http://www.monitor.com/Portals/0/MonitorContent/imported/MonitorUnitedStates/Articles/PDFs/Monitor\\_360\\_The\\_Future\\_of\\_Global\\_Smart\\_Grids.pdf](http://www.monitor.com/Portals/0/MonitorContent/imported/MonitorUnitedStates/Articles/PDFs/Monitor_360_The_Future_of_Global_Smart_Grids.pdf)

## **'Smart' Grid: New Critics of a Bad Idea by Robert Michaels (January 12, 2010)**

"Possibly the most fascinating aspect of the Smart Grid is the absence of an economic rationale. But industry incentives being what they are (concentrated benefits, diffused costs), many have bet on much of it being built. Boondoggles must pass political tests, not economic ones. ... The utilities have yet to find consultants who can make an easy case for the grids. ... Just about everyone agrees that its main effect will be to time-shift peak consumption, with little if any effect on total power use, i.e. no carbon consequences."<sup>4</sup>

### **Simplicity versus Complexity**

The difference between simple models and complex models is that complex models require experts, consultants, hired guns, patents and confidential business information.

Complexity requires consumer confidence that legislators, regulators and bureaucrats will do the right thing as large vested interests throw huge amounts of cash, awards, prizes, trips and gifts aimed at getting acceptance of their preferred solutions.

Some would even say that complex models can not be understood by the layperson who just gets in the way of those who know what they are doing and are getting handsomely paid for it.

Simple models are driven by community values. They are community friendly and utilize participatory democracy. Thus they are less efficient to implement but in the long-run are more desirable from a societal perspective.

Could a complex system be better than a simple solution.

Yes, but not because its proponents say so based on the thickness of their pocketbook.

Rather, the choice of solutions must be based on *community values and involve* scientifically sound and data driven analysis.

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<sup>4</sup> <http://www.masterresource.org/2010/01/smart-grid-wheres-the-beef/>



**Hawaii Solar Energy Association**  
*Serving Hawaii Since 1977*

Before the House Committee on Energy & Environmental Protection  
Before the House Committee on Economic Development & Business  
Tuesday, March 19, 2013, 8:30 a.m., Conference Room 325  
SB 1040: RELATING TO ELECTRICAL SYSTEMS

Aloha Chair Lee, Chair Tsuji, Vice-Chair Thielen, Vice-Chair Ward, and members of the House Committee on Energy & Environmental Protection, and House Committee on Economic Development & Business,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify **in support for SB 1040**, which authorizes the Public Utilities Commission to consider the value of implementing advance grid modernization technology in the state.

Solar is key to our Green Energy Future

As we all know, Hawaii is dangerously dependent upon imported fossil fuels, and the cost and uncertainty of fossil fuels will only increase. Recent reports have indicated that oil may reach \$180/barrel or more by 2020, and scientists have found that climate change is occurring more quickly than generally believed, with the most current data showing that the Antarctic is warming three times the predicted rate. Transforming our electrical grid to a green energy infrastructure will bring both added security and stability to our state's economy, and also contribute to an overall reduction of greenhouse gasses for everyone.

The grid is the weak link

Hawaii has made tremendous progress in meeting its clean energy goals. In its 2011 Renewable Portfolio Standard Status Report, the Utility reports that installs from net energy metering alone were 29.7 MW, more than double 11.5 MW from 2010. 2012 will show an even larger gain. However, installation of non-utility scale PV on many circuits, especially on Maui, has become difficult as the number of renewables has reached the 15% saturation limit. Once this happens, an expensive study must be performed by the utility customer. And even then, installation is not guaranteed, in spite of relaxed standards in some areas implemented just this last year. Utility scale projects have similar concerns. Simply put, in order to move ahead with our clean energy goals, we need an updated electrical grid that can easily accept the latest technology. This bill would give a mandate to the PUC to put the question of grid upgrades front and center.

Thank you for the opportunity to testify.

Leslie Cole-Brooks  
Executive Director  
Hawaii Solar Energy Association





# Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803  
808.538.6616 hawaii.chapter@sierraclub.org

## HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

March 19, 2013, 8:30 A.M.  
(Testimony is 1 page long)

### TESTIMONY IN SUPPORT OF SB 1040 WITH A PROPOSED AMENDMENT

Aloha Chair Lee and members of the Committee:

The Sierra Club, Hawaii Chapter, with over 10,000 dues paying members and supporters statewide, respectfully *supports* SB 1040. The bill is a smart policy signal for the Public Utilities Commission to build a modern grid infrastructure that can compliment renewable energy production by making better use of fluctuating power sources and advance energy efficiency through the use of smart meters.

A smart grid allows a utility to communicate with many devices plugged into the grid, as well as power sources. Each device on the network can be given sensors to gather data (power meters, voltage sensors, fault detectors, etc.), plus two-way digital communication between the device in the field and the utility's network operations center. A key feature of the smart grid is automation technology that lets the utility adjust and control each individual device or millions of devices from a central location.

The Sierra Club strongly believes the success of our aggressive clean energy goals will only be accomplished with significant improvements to our existing grid. We recommend adding language indicating the PUC can increase the rate of return on these types of investments so as to provide an even stronger policy signal that we prefer our utilities to invest their limited capitol on improving the grid, rather than investing in more power production facilities. Perhaps a new line after line 22 on page 2, stating "The commission may consider a higher rate of return if necessary to ensure investment in advanced grid modernization technology."

Mahalo for the opportunity to testify.



## **HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION**

March 19, 2013, 8:30 A.M.

Room 325

**(Testimony is 1 page long)**

### **TESTIMONY IN STRONG SUPPORT OF SB 1040**

Chair Lee and members of the Energy & Environmental Protection Committee:

The Blue Planet Foundation strongly supports SB 1040, authorizing the Public Utilities Commission to consider the value of implementing advanced grid modernization (“smart grid”) technology in the State. This measure will provide policy guidance to the Commission to help them weigh the often competing objectives in their deliberations. This measure is not a mandate to build the “smart grid;” it is direction to the Commission to consider its merits in their decision making. We believe enactment of SB 1040 will accelerate Hawaii’s transition to a clean energy future.

Hawaii’s 1890s style power grid is a barrier to the clean energy revolution. Currently, electricity flows in one direction: from the power plant to your home or business. This is much like television in the 1960s. When you turned on the TV, you watched whatever one of the three networks was broadcasting. You couldn’t store the broadcast and you couldn’t contribute your own content. That’s roughly how our power grid operates today.

To take advantage of distributed and diversified sources like solar, wind, and wave, the grid has to become smarter and have the capacity to store electricity. It will resemble today’s Internet—where distributed servers both send and receive packets of information—and less like yesterday’s commercial television. Such a self-aware, robust smart grid will instantaneously adjust to shifts in wind strength or cloud cover over solar, balancing energy loads on the other side of the wire and drawing on stored energy when needed.

Senate Bill 1040 requires that the Commission consider the value of modernizing Hawaii’s electricity grid to accommodate more clean energy sources. Blue Planet fully supports this policy.

Thank you for this opportunity to testify.

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Elaine Dunbar

March 17, 2013

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**SB 1040: RELATING TO ELECTRIC SYSTEMS**

**Report Title:** Grid Infrastructure Modernization Technology; Electric Utilities; Electric Systems; Public Utilities Commission

**Description:** Authorizes the Public Utilities Commission to consider the value of implementing advanced grid modernization technology in the State.

Aloha Chair and Committee Members,

I testify in **OPPOSITION** to **SB1040**.

It is a little frightening to say the least that something so potentially dangerous is being introduced and advocated for by corporations that stand to benefit tremendously and for that reason only.

This is the next step to placing everyone in Hawaii in harm's way of cyber-attacks. Not just one system goes down but this proposal ensures that everyone's system will go down at the same time. Why isn't this being investigated in the rush to approve another technology nightmare that is solely for the purpose of profit at our expense? These gambles are played with taxpayer dollars and the Hawaii State Constitution provides stringent demands for oversight in that area. And speaking of public money expenses to implement this proposal, what happens when it goes belly up (like so many before which become archaic dinosaurs of technology overnight) and who gets further into the red because of stupid decisions made by a few in this legislature? The state does. The residents suffer more hardship trying to re-coup bad calls made by this legislature. Why do we have to suffer through more risky and shady deals because some legislators have been conned into feeling like they're 'playing in the big league'? Big league, yes, of super cons by big ruthless companies pushing admittedly obsolete/borderline obsolete technological ideas to make up for their bottom line deficits. We are already knee deep in the 'smart' meter con without even be prepared for the looming impacts.

If the PUC already has authorization what is going on here? Is it to provide another opportunity to tap into that endless pit of government money along with which tax 'incentives' are given? This is madness and a continuing bad act that is causing this state shortfalls.

Where is the report that is due this year after the 2012 Legislature ALREADY DID THIS therefore, making this 2013 legislation redundant?

Because the language is so incredibly broad and unclear, is the thrust of this proposal to pave the way for geothermal? Then it should state that.

If something is so difficult to comprehend or impossible to discern the true intent, wouldn't be logical to assume that,

- 1) it is seeking to do something other than described or,
- 2) a Legislator should not be approving something they do not fully understand or,
- 3) the proponents have not worked out the details yet but would like approval anyway?

**thielen3 - Charles**

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Monday, March 18, 2013 1:02 AM  
**To:** EEPtestimony  
**Cc:** ewabond@gmail.com  
**Subject:** Submitted testimony for SB1040 on Mar 19, 2013 08:30AM

**SB1040**

Submitted on: 3/18/2013

Testimony for EEP on Mar 19, 2013 08:30AM in Conference Room 325

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
John Bond	Individual	Oppose	No

Comments: I support the position of Life of the Land. "Smart Grid proponents rely on a dearth of economic analysis and no cost-benefit analysis. Should Hawai'i throw the dice and gamble that somehow SMART GRIDS will increase renewable energy penetration and decrease the cost of electricity? SB 1040 defines "Advanced grid modernization technology" without including any references to costs or impacts." John Bond

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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