



**DAVID Y. IGE**  
GOVERNOR

**DOUGLAS S. CHIN**  
LIEUTENANT GOVERNOR

**STATE OF HAWAII  
OFFICE OF THE DIRECTOR  
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS**

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**CATHERINE P. AWAKUNI COLÓN**  
DIRECTOR

**JO ANN M. UCHIDA TAKEUCHI**  
DEPUTY DIRECTOR

**TO THE HOUSE COMMITTEE ON  
FINANCE**

**TWENTY-NINTH LEGISLATURE  
Regular Session of 2018**

Friday, February 23, 2018  
2:00 p.m.

**TESTIMONY OF DEAN NISHINA, EXECUTIVE DIRECTOR, DIVISION OF  
CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER  
AFFAIRS, TO THE HONORABLE SYLVIA LUKE, CHAIR,  
AND MEMBERS OF THE COMMITTEE**

**HOUSE BILL NO. 2110, H.D. 2 - RELATING TO RESILIENCY.**

**DESCRIPTION:**

This measure directs the Public Utilities Commission ("Commission") to establish a microgrid services tariff or tariffs to encourage and facilitate the development and use of energy resilient microgrids, and includes language in section 3 of the bill that directs the Commission to consider and learn from the actions taken to establish and deploy microgrids in Puerto Rico. This House Draft 2 version amends the effective date of the measure.

**POSITION:**

The Division of Consumer Advocacy ("Consumer Advocate") offers comments on this bill.

COMMENTS:

The Consumer Advocate appreciates the Legislature's recognition that Hawaii must approach its energy planning future with a holistic vision. The Consumer Advocate has consistently been advocating for electric service that is affordable, safe, reliable, and resilient. The Consumer Advocate agrees that microgrids could have a significant role to play in achieving Hawaii's clean energy policies and that steps should be taken to ensure Hawaii can investigate the role that microgrids might play. The Consumer Advocate also appreciates the Legislature's acknowledgement that microgrids could adversely impact other customers. To protect all customers' interests, the necessary analysis should be allowed to proceed before the Commission. There is currently a docket before the Commission that focuses on Distributed Energy Resources, Docket No. 2014-0192. Some of the apparent objectives of this proposed measure should be addressed in the upcoming phase of that docket. Thus, the Consumer Advocate suggests that, rather than advancing this bill, the Legislature consider allowing the Commission to continue its efforts in Docket No. 2014-0192 and deferring this bill. If, however, the Legislature believes it is necessary to communicate its desire to have the Commission address microgrids, the Consumer Advocate suggests that using a resolution to communicate that desire, rather than a statute, might be sufficient and more administratively efficient.

Thank you for this opportunity to testify.



SIERRA CLUB OF HAWAI'I  
MĀLAMA I KA HONUA. *Cherish the Earth.*

## HOUSE COMMITTEE ON FINANCE

Friday, February 23, 2018 2:00PM Conference Room 308

**In SUPPORT of HB 2110 HD2** Relating to resiliency

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Aloha Chair Luke, Vice Chair Cullen and members of the Committee,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i, a member of the Common Good Coalition, **supports HB 2110 HD2**, which directs the Public Utilities Commission (PUC) to establish a microgrid services tariff to encourage and facilitate the development and use of energy resilient microgrids.

In general, the Sierra Club of Hawai'i *supports any effort to build renewable energy that helps meet our state's goal of 100% renewable by 2045*. Microgrids have the added benefit of providing access to these types of energy generation to a wider and more diverse range of communities. Microgrids such as the one proposed in HB 2110 HD2 has the potential to benefit low and middle income communities and renters, to demographics that might not otherwise be able to benefit from residential distributed energy generation.

Expedited interconnection of microgrids is likely to be a subject of major energy policy making in the years to come. The Integrated Resources Planning docket, Power Supply Improvement Plan, and Hawai'i Electric Company (HECO)'s recent Grid Modernization plan all subsume, in one form or another, the concept of residential, commercial, and utility scale microgrids. Renewables across the state over the last few years have been mired by ineffective and poorly administered interconnection processes that have slowed state progress towards 100% renewable. Allowing the PUC to begin a process to examine the interconnection of any sized microgrid is important and necessary.

Although not specifically called out within the statute as written, we propose that any energy generated by and interconnected microgrid and sold to off-site consumers be prioritized for low and middle income communities, Department of Hawaiian Homelands (DHHL) communities,

and students. We also recommend, to the extent possible, that locally owned companies, installers, and contractors be given priority during bid or development of any project.

Thank you for the opportunity to testify in **support of HD 2110 HD2**.



## HOUSE COMMITTEE ON FINANCE

February 23, 2018, 2:00 P.M.

Room 308

(Testimony is 2 pages long)

### TESTIMONY IN STRONG SUPPORT OF HB 2110 HD2

Aloha Chair Luke, Vice Chair Cullen, and Committee members:

Blue Planet Foundation **strongly supports** HB 2110 HD2, seeking to strengthen Hawaii's energy systems by facilitating the development of energy resilient microgrids. This measure directs the Public Utilities Commission (PUC) to establish a microgrid services tariff to standardize the value of services exchanged between the microgrid owner and the utility.

We respectfully ask that the Committee on Finance amend HB 2110 HD2 to take effect upon approval.

The devastation of Puerto Rico by Hurricane Maria last year was a painful wake-up call. Like Puerto Rico, Hawaii's current energy system is not designed for the violence of climate change. Nearly 90% of Puerto Rico residents lacked power one month after the storm hit. Today, Puerto Rico is rebuilding its energy system and incorporating microgrids, or smaller grids with local control capability that can disconnect from the larger electricity grid and operate autonomously. This is critical for times when a severe storm or disaster knocks out the larger electricity grid. **In times of emergency, residents need safe energy "oases" with energy storage to power critical medical equipment, provide refrigeration, and charge critical communication devices.**

While Hawaii is a national leader in developing renewable energy, few microgrids have been developed, as their development has been inhibited by a number of factors, **including interconnection barriers and a lack of a standard of terms regarding the value of services exchanged between the microgrid operator and the utility.**

Microgrids—a small configuration of renewable energy, energy storage, and control that is connected to the larger electricity grid—can strengthen our energy system and reduce costs for everyone. They are also capable of operating alone, or "islanding," in the event that the larger power grid fails, providing needed safe havens in times of disaster or emergency.

**But microgrids aren't just for emergencies.** During regular use, microgrids can provide valuable services to help regulate the power on the larger utility grid. By smartly controlling the

loads, storage, renewable energy, and electric vehicles that are connected within a microgrid, the microgrid itself can help regulate frequency, provide voltage control, shift load, provide demand response capabilities, and other ancillary services.

House Bill 2110 HD2 provides guidance to the PUC to develop a tariff for such microgrid services, **ensuring that such a tariff is designed to provide fair compensation for electricity, electric grid services, and other benefits provided to or by the electric utility,** the person or entity operating the microgrid, and other ratepayers. Further, in developing the tariff, the PUC, to the extent possible, should seek to **standardize and streamline the related interconnection processes for microgrid projects.** This would encourage and facilitate the development of microgrids and leverage the technology for the benefit and security of our islands' power systems.

Without a standard process for valuing microgrid services and a clear process to interconnect, Hawaii risks that future microgrids might disconnect from the utility grid altogether. When this happens, not only do other utility customers lose the benefit of the services that the microgrid provides, they may also face increased rates as the overall energy system costs are covered by fewer customers.

**Hawaii has the opportunity to meet the trifecta of needs for more renewable energy, greater resiliency, and public safety by harnessing the power of energy storage, microgrids, and smart planning.**

We respectfully request that the Committee forward HB 2110 HD2 amended to take effect upon approval.

Thank you for the opportunity to testify.



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

**TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION  
IN REGARD TO HB 2110 HD2, RELATING TO ENERGY RESILIENCY  
BEFORE THE  
HOUSE COMMITTEE ON FINANCE  
ON  
FRIDAY, FEBRUARY 23, 2018**

Chair Luke, Vice-Chair Cullen, and members of the committee, my name is Will Giese, and I represent the Hawaii Solar Energy Association, Inc. (HSEA)

HSEA **strongly supports** HB 2110 HD2. This measure directs the Public Utilities Commission to establish a microgrid services tariff to encourage and facilitate the development and use of energy resilient microgrids.

Microgrids build resiliency and safety into Hawaii's electric grid, are an essential part of the path the Hawaii's 100% renewable energy future, and are necessary to the widescale adoption of renewable energy at all levels of community. A well-designed tariff for microgrid developments that provide for the many benefits and grid services these types of projects provide will improve the overall health of the electric grid while simultaneously provide much needed rate relief to energy consumers.

Expedited interconnection of microgrids is likely to be a subject of major energy policy making in the years to come. The Integrated Resources Planning docket, Power Supply Improvement Plan, and HECO's recent Grid Modernization plan all subsume, in one form or another, the concept of residential, commercial, and utility scale microgrids. Renewables across the state over the last few years have been mired by ineffective and poorly administered interconnection processes that have slowed state progress towards 100% renewable. Allowing the Public Utilities Commission to begin a process to examine the interconnection of any sized microgrid is important and necessary.

We **strongly support** HB 2110 HD2 and we urge this committee to pass this measure.

Thank you for the opportunity to testify.



**Testimony before the House Committee on Consumer Protection & Commerce**

**February 23, 2018**

**2:00 pm**

**Conference Room 308**

**H.B. 2110 HD2 Relating to Resiliency**

**By Keiki-Pua Dancil, Ph.D.**

**Director, Business Strategy Development**

**Hawaiian Electric Company, Inc.**

Chair Luke, Vice Chair Cullen, and Members of the Committee:

My name is Keiki-Pua Dancil, and I am the Director of Business Strategy Development at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric and its subsidiary utilities, Maui Electric and Hawaii Electric Light (collectively “Companies”). The Companies **support** H.B. 2110 HD2, however would like to **offer suggested edits** (see below), which we feel would improve the effectiveness of the proposed bill.

As we transition to a 100% renewable future, safety, reliability, and resiliency of our island grids is paramount. The Companies believe that properly designed microgrids may provide benefits to all. The Companies are encouraged with the language in the proposed bill and support working through a PUC process to help identify appropriate microgrid programs and tariff structures.

In HD2, Section 3, the bill identifies Puerto Rico as the only example. The Companies would like to expand this to “other jurisdictions, including Puerto Rico” as there are many lessons learned beyond those from Puerto Rico, which is still in the process of rebuilding and establishing its infrastructure.

SECTION 3. In establishing a microgrid services tariff, the public utilities commission shall consider the actions taken to establish and deploy microgrids in other jurisdictions, including Puerto Rico, ~~following the 2017 Atlantic hurricane season and the preemptive steps the State can take to address a potential similar local disasters~~s in the future

Thank you for the opportunity to provide this testimony.



OFFICE OF CLIMATE CHANGE, SUSTAINABILITY AND RESILIENCY  
**CITY AND COUNTY OF HONOLULU**

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KIRK CALDWELL  
MAYOR

JOSHUA W. STANBRO  
EXECUTIVE DIRECTOR &  
CHIEF RESILIENCE OFFICER

FRIDAY, FEBRUARY 23, 2018 2:00PM

STATE OF HAWAII  
HOUSE COMMITTEE ON FINANCE

**TESTIMONY ON HOUSE BILL 2110 HD2  
A BILL RELATING TO RESILIENCY**

BY,

JOSHUA STANBRO  
EXECUTIVE DIRECTOR & CHIEF RESILIENCE OFFICER  
OFFICE OF CLIMATE CHANGE, SUSTAINABILITY AND RESILIENCY

Dear Chair Luke and Committee Members:

The City and County of Honolulu (City) Office of Climate Change, Sustainability and Resiliency (CCSR) **offers comments** on House Bill 2110 HD2, which directs the Public Utilities Commission to open a proceeding to establish a microgrid services tariff.

CCSR was established in City Charter with the overwhelming support of O'ahu's voters. Among other responsibilities, CCSR is tasked with coordinating City actions and policies to increase community preparedness, protect economic activity, and develop resilient infrastructure in response to the effects of climate change. CCSR's mandate further includes developing City policies and programs to advance environmental priorities and integrating sustainable and environmental values into City plans.

CCSR supports measures that reduce barriers to the deployment of infrastructure and investments that enhance resilience. Microgrids offer a unique opportunity to simultaneously improve the resilience of the electrical grid, provide emergency services, and generate renewable energy and other grid services in support of the City's overall energy objectives. Developing a tariff with standardized terms, rules, and rates will help facilitate the deployment of microgrids in an expeditious and cost-effective manner to the benefit of the overall system. CCSR is concerned that this measure mandates the Public Utilities Commission to open a proceeding to establish a microgrid services tariff by July 2018.

Thank you for the opportunity to testify.

**HB-2110-HD-2**

Submitted on: 2/22/2018 3:42:55 AM

Testimony for FIN on 2/23/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jun Shin	Young Progressives Demanding Action - Hawaii	Support	No

Comments:

In strong support! This will allow more access to the different communities that exist in Hawaii.



Email: [communications@ulupono.com](mailto:communications@ulupono.com)

HOUSE COMMITTEE ON FINANCE  
Friday, February 23, 2018 — 2:00 p.m. — Room 308

**Ulupono Initiative Strongly Supports HB 2110 HD 2 with an Amendment, Relating to Resiliency**

Dear Chair Luke, Vice Chair Cullen, and Members of the Committee:

My name is Kyle Datta and I am General Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and better management of waste and fresh water. Ulupono believes that self-sufficiency is essential to our future prosperity and will help shape a future where economic progress and mission-focused impact can work hand in hand.

**Ulupono strongly supports HB 2110 HD 2**, which directs the Public Utilities Commission to establish a microgrid services tariff, because it aligns with our goal of increasing the production of clean, renewable energy and will make our islands more resilient in the event of a natural disaster.

Renewable energy innovation is needed to achieve the state's ambitious goal of 100 percent clean energy by 2045. Microgrid projects can provide communities and organizations with a faster path for incorporating renewable energy production and storage projects. Microgrids provide each island's system with greater resilience because these grids are able to separate from the electricity grid if it fails and then help restart the grid. While the Department of Defense's microgrids help play this role today, additional microgrids on the civilian side would augment system security for all. For critical facilities that need a continuous supply of electricity from a microgrid, such as hospitals, the water utility, police and telecommunications, along with resort complexes, microgrids can sometimes provide higher reliability and resilience than the traditional utility.

I currently serve on the Transformation Advisory Council for PREPA in Puerto Rico and microgrids are very much under consideration as Puerto Rico moves forward for exactly the reasons stated above. The Puerto Rico commission (PREC) recently passed the initial regulations authorizing microgrids.

For microgrids to be part of Hawai'i's electrical system, the economic relationships

*Investing in a Sustainable Hawai'i*

between the microgrid owner and the host utility must be efficient and equitable. The pricing between the two parties should adhere to the fundamental principle that each party receives value for the services it provides and pays for the services it needs. Thus, Ulupono strongly endorses the language on page 4, (1) and (2), regarding the microgrid services tariff.

We recommend, for the avoidance of doubt, that we add an additional line after line 20 on page 4:

“(3) Will not make the microgrid a public utility”

We add this clarification to avoid a situation where the microgrid would become a public utility because it sold power across tax map keys. This would add an unnecessary administrative burden.

As Hawai‘i’s energy issues become more complex and challenging, we appreciate this committee’s efforts to look at policies that support renewable energy production.

Thank you for this opportunity to testify.

Respectfully,

Kyle Datta  
General Partner



COLLEGE OF SOCIAL SCIENCES  
**HAWAII ENERGY POLICY FORUM**  
UNIVERSITY OF HAWAI'I AT MĀNOA

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**Hawaii Energy Policy Forum**

Jeanne Schultz Afuvai, Hawaii Inst. for Public Affairs  
David Bissell, Kauai Island Utility Cooperative  
Michael Brittain, IBEW, Local Union 1260  
Jade Butay, Hawaii Dept of Transportation  
Caroline Carl, Hawaii Energy  
Albert Chee, Island Energy Services  
Elizabeth Cole, The Kohala Center  
Kyle Datta, Ulu pono Initiative  
Richard DeGarmo, Hawaii Gas  
Mitch Ewan, UH Hawaii Natural Energy Institute  
Jay Fidell, ThinkTech Hawaii  
Carl Freedman, Haiku Design & Analysis  
Matthias Fripp, REIS at University of Hawaii  
Ford Fuchigami, Ofc of Hawaii State Governor  
Will Giese, Inter-Island Solar Supply  
Dale Hahn, Ofc of US Senator Brian Schatz  
Michael Hamnett, SSRI at University of Hawaii  
Senator Lorraine Inouye, Hawaii State Legislature  
Randy Iwase, Public Utilities Commission  
Darren Kimura, Energy Industries  
Representative Chris Lee, Hawaii State Legislature  
Gladys Marrone, Building Industry Assn of Hawaii  
Stephen Meder, UH Facilities and Planning  
Sharon Moriawaki, UH Public Policy Center  
Rocky Mould, Ofc of Climate Change  
Aina Naniolo, Ofc of US Congresswoman Colleen Hanabusa  
Ron Nelson, Defense Logistics Energy Agency  
Dean Nishina, Division of Consumer Advocacy  
Denise Oda, US Department of Agriculture  
Stan Osserman, HCATT  
Melissa Pavlicek, Hawaii Public Policy Advocates  
Randy Perreira, Hawaii Government Employees Assn  
Fredrick Redell, Maui County Energy Office  
Rick Rocheleau, UH Hawaii Natural Energy Institute  
Ross Roley, PACOM  
Will Rolston, Hawaii County, Research & Development  
Peter Rosegg, Hawaiian Electric Companies  
Scott Seu, Hawaiian Electric Companies  
Carlynn Shon, Hawaii State Energy Office, DBEDT  
Joelle Simonpietri, Simonpietri LLC  
Ben Sullivan, Kauai County  
Lance Tanaka, Par Hawaii  
Maria Tome, Public Utilities Commission  
Kirsten Turner, Ofc of US Representative Tulsi Gabbard  
Alan Yamamoto, Ofc of US Senator Mazie Hirono

Testimony of John Cole  
Chair, Electricity Working Group  
Hawaii Energy Policy Forum

To the  
House Committee on Finance

February 23, 2018 at 2:00 pm in Conference Room 308

**IN SUPPORT OF HB 2110, HOUSE DRAFT 2, RELATING TO  
RESILIENCY**

Chair Luke, Vice-Chair Cullen, and Members of the Committee,

I am John Cole, Chair of the Electricity Working Group of the Hawaii Energy Policy Forum (Forum). The Forum, created in 2002, is comprised of over 40 representatives from Hawaii's electric utilities, oil and natural gas suppliers, environmental and community groups, renewable energy industry, and federal, state and local government, including representatives from the neighbor islands. Our vision and mission, and comprehensive "10 Point Action Plan" serves as a guide to move Hawaii toward its preferred energy goals and our support for this bill.

HB 2110 HD2, directs the Public Utilities Commission to establish a microgrid services tariff.

**The Forum supports this bill for the following reasons:**

Not only can microgrids increase resiliency and allow for faster recovery in the event of natural disasters and other emergencies, they can also provide valuable grid services on a day-to-day basis through the coordination and control of a microgrids generation and loads. The Forum supports establishing a tariff that standardizes and streamlines projects, and provides fair compensation for services and benefits provided to or by the electric utility, microgrid operators, and ratepayers.

Thank you for the opportunity to testify.

*This testimony reflects the position of the Forum as a whole and not necessarily of the individual Forum members or their companies*

**HB-2110-HD-2**

Submitted on: 2/22/2018 1:49:34 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	OCC Legislative Priorities Committee, Democratic Party of Hawaii	Support	No

Comments:



Before the House Committee on Finance  
Friday, February 23, 2018, room 308, 2:00 p.m.  
HB 2110 HD 2: RELATING TO RESILIENCY

Aloha Chair Luke, Vice Chair Cullen, and members of the Committee,

On behalf of the Distributed Energy Resources Council of Hawaii (“DER Council”), I would like to testify in strong support for HB 2110 HD 2, which directs the Public Utilities Commission to establish a microgrid services tariff to facilitate and encourage the development and use of energy resilient microgrids. The DER Council is a nonprofit trade organization formed to assist with the development of distributed energy resources and smart grid technologies to support an affordable, reliable, and sustainable energy supply for Hawaii.

Microgrids have the unique feature of being able to operate both in parallel with the electrical grid and also independently from the electrical grid depending upon the current best use of the renewable energy installation. This extremely flexible resource can support various grid services such as integrating energy storage and demand response, load shifting, frequency and voltage support, in addition to providing an independent source of power during grid emergencies. As Hawaii begins to focus on grid resiliency, the development of microgrids should be a substantial part of the planning process.

However, there is no clear regulatory pathway at this point for the development of microgrids and the means by which the utility will integrate the microgrid function. Although several other distributed energy resources dockets are currently active at the PUC, none of the current dockets focus specifically on microgrids. This subject is complex enough to warrant a separate deliberation, and we should not expect that it would be inserted into the current ongoing dockets.

Therefore, DERC strongly supports HB 2110 HD 2. Now is the time to provide substantial support for Hawaii’s grid resiliency.

Thank you for the opportunity to testify

Leslie Cole-Brooks  
Executive Director  
DER Council of Hawaii



HB2110 HD2

Energy Resiliency; Microgrid Services Tariff

February 23, 2018, 2:00p.m.

Relating to Resiliency

Aloha Chair Luke, Vice Chair Cullen, and members of the committee, my name is Maxim Poudrier-Tudan, and with the Sierra Student Coalition at the University of Hawaii at Manoa. The Sierra Student Coalition at the university of Hawaii at Manoa stands in Support of HB2110 HD2 relating to resiliency.

HB2110 HD2 creates a tariff to help not only encourage, but enable the establishment of a microgrid here in Hawai'i. The benefits of Having a microgrid are unprecedented, and thus funding a microgrid is imperative for Hawai'i's future. Residents and businesses are vulnerable to disruptions in the islands' energy systems caused by extreme weather events or other disasters. Microgrids would build energy resiliency into our communities, thereby increasing public safety and security. Microgrids hold great potential as a way for small groups of energy users as well. Energy users such as an apartment complex, a hotel, a school campus--to produce their own energy and be self-sufficient in the event of an emergency. Not only this, but microgrids such as the one proposed in HB 2110 HD2 has the potential to benefit low and middle-income communities and renters, to demographics that might not otherwise be able to benefit from residential distributed energy generation.

These microgrids can also provide services to the PUC by creating systems of energy storage and demand response to support load shifting, frequency response, and voltage control. Funding this microgrid will help unlock the microgrid market by creating clear, standard terms for microgrids to apply. Allowing the PUC to begin a process to examine the interconnection of any sized microgrid is necessary, and of great importance. HB2110 HD2 will help the state of Hawaii reach its goal of 100% renewable energy by 2045.

Mahalo for the opportunity to submit testimony.



**HB-2110-HD-2**

Submitted on: 2/21/2018 11:35:51 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Michael Reed Gach	Individual	Support	No

Comments:

Please support this vital resiliency bill which directs the Public Utilities Commission to establish a microgrid services tariff to encourage and facilitate the development and use of energy resilient microgrids.

**I urge you to support HB2110 HD2.**

Thank you.

**HB-2110-HD-2**

Submitted on: 2/22/2018 11:04:40 AM

Testimony for FIN on 2/23/2018 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Denise Boisvert	Individual	Support	No

Comments:

The time to act is now – let's not close the barn door after the horse is out.

I am in strong support of HB 2110 which directs the PUC to establish a microgrid services tariff to encourage and facilitate the development and use of energy resilient microgrids.

**HB-2110-HD-2**

Submitted on: 2/22/2018 7:41:23 AM

Testimony for FIN on 2/23/2018 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
chi guyer	Individual	Support	No

Comments:

please pass. chi pilialoha guyer of maui

**HB-2110-HD-2**

Submitted on: 2/22/2018 8:01:30 AM

Testimony for FIN on 2/23/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Nathan Yuen	Individual	Support	No

Comments:

Dear Chair Sylvia Luke and Vice-Chair Ty J.K. Cullen:

I strongly support HB2110 HD2 which directs the Public Utilities Commission to establish a microgrid services tariff to encourage and facilitate the development and use of energy resilient microgrids.

Microgrids support Hawaii's clean energy policies by integrating renewable energy and advanced distributed energy resources. Microgrids can also provide valuable services to the public utility electricity grid, including energy storage and demand response, to support load shifting, frequency response, and voltage control, among other ancillary services.

I strongly support HB2110 HD2 to implement micrigrids in our electrical infrastructure. Thank for for this opportunity to testify on this important matter.

Sincerely,

Nathan Yuen

**HB-2110-HD-2**

Submitted on: 2/22/2018 11:12:13 AM

Testimony for FIN on 2/23/2018 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Merle Hayward	Individual	Support	No

Comments:

strongly support HD2

**HB-2110-HD-2**

Submitted on: 2/22/2018 11:19:24 AM

Testimony for FIN on 2/23/2018 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Kim Jorgensen	Individual	Support	No

Comments:

Coulda, shoulda, woulda – three words I hope are never said if the catastrophe that hit Puerto Rico hits Hawaii.

Please support HB 2110 to establish a microgrid services tariff to encourage and facilitate the development and use of energy resilient microgrids.

**HB-2110-HD-2**

Submitted on: 2/22/2018 11:58:04 AM

Testimony for FIN on 2/23/2018 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Shannon Rudolph	Individual	Support	No

Comments:

Support

**HB-2110-HD-2**

Submitted on: 2/22/2018 1:24:28 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Nancy Davlantes	Individual	Support	No

Comments:



**HB-2110-HD-2**

Submitted on: 2/22/2018 1:27:50 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Javier Mendez-Alvarez	Individual	Support	No

Comments:

**HB-2110-HD-2**

Submitted on: 2/22/2018 1:35:11 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Sarah Toole	Individual	Support	No

Comments:

I strongly support this measure.

Sarah Toole

1128 Ala Napunani St 96818

UH Manoa Political Science student

**LATE**

**HB-2110-HD-2**

Submitted on: 2/22/2018 3:48:17 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Diane Ware	Individual	Support	No

Comments:

Please support this bill with positive vote to advance growth of microgrids and move to end fossil fuel use.

Mahalo nui

Diane Ware

99-7815 Kapoha Volcano Hi 96785 808-967-8642

**LATE**

**HB-2110-HD-2**

Submitted on: 2/22/2018 4:02:53 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Sandra Fujita	Individual	Support	No

Comments:

**LATE**

**HB-2110-HD-2**

Submitted on: 2/22/2018 5:06:43 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Milholen	Individual	Support	No

Comments:

**LATE**

**HB-2110-HD-2**

Submitted on: 2/22/2018 7:58:43 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Cory Harden	Individual	Support	No

Comments:

**LATE**

**HB-2110-HD-2**

Submitted on: 2/22/2018 9:50:58 PM

Testimony for FIN on 2/23/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
James McCay	Individual	Support	No

Comments:

Strong Support.

Thank you,  
James McCay  
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