TESTIMONY OF RANDY IWASE
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII
TO THE
SENATE COMMITTEE ON
TRANSPORTATION AND ENERGY
AND
COMMERCE, CONSUMER PROTECTION, AND HEALTH

March 19, 2018
3:15 p.m.

MEASURE: H.B. No. 2460 HD2
TITLE: RELATING TO MICROGRIDS.

Chair Inouye and Chair Baker and Members of the Committees:

DESCRIPTION:

Authorizes the establishment of a Natural Energy Laboratory of Hawaii Authority (NELHA) microgrid demonstration project for the generation, storage, and distribution of renewable energy on property controlled by NELHA. (HB2460 HD2)

POSITION:

The Public Utilities Commission ("Commission") offers the following comments for consideration.

COMMENTS:

The Commission supports the development of microgrids as an option to meet the energy needs of customers as articulated in the Commission's Inclinations on the Future of Hawaii's Electric Utilities (See Docket No. 2012-0036, Order No. 32052). Microgrids offer the potential to aggregate pockets of load and generation resources, which can disconnect and reconnect to the larger grid in times of emergency.

The Commission notes that the Legislature is also considering H.B. 2110, which would require the Commission to open a proceeding to establish a microgrid services tariff. As such, Section 2 (d) of H.B. 2460 may not be necessary.

The Commission further notes that oversight and consumer protection issues may arise for entities served or affected by a microgrid exempt from Commission regulation. For example, it is unclear if this measure could result in undue subsidization of the NELHA microgrid demonstration project by other customers, absent Commission review.

Thank you for the opportunity to testify on this measure.

Testimony before the Senate Committee on Transportation & Energy and the Senate Committee on Commerce, Consumer Protection, and Health

March 19, 2018
3:15 pm
Conference Room 225
H.B. 2460 HD2 – Relating to Resiliency

By Keiki-Pua Dancil, Ph.D.
Director, Business Strategy Development
Hawaiian Electric Company, Inc.

Chairs Inouye & Baker, Vice Chairs Espero & Tokuda, and Members of the Committees:

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 the intent but **oppose** H.B. 2460 HD2.

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.

Currently, there is another bill, H.B. 2110 HD2, that encourages and facilitates the development and use of microgrids through the establishment of a standard microgrid services tariff and directs the PUC to open a proceeding to establish a microgrid services tariff by July 1, 2018. The Companies support H.B. 2110 HD2 and believe it will better accomplish the intent of H.B. 2460 HD2.

The Companies further suggest that the NELHA site be identified as the first demonstration microgrid project after the rules and tariffs are established for microgrids per H.B. 2110 HD 2.

Thank you for the opportunity to provide this testimony.

NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

An Authority of the State of Hawaii attached to the Department of Business, Economic Development & Tourism

Statement of
Gregory P. Barbour
Executive Director
Natural Energy Laboratory of Hawaii Authority
before the

SENATE COMMITTEE TRANSPORTATION AND ENERGY
AND
SENATE COMMITTEE COMMERCE, CONSUMER PROTECTION, AND HEALTH

Monday March 19, 2018
3:15 pm
State Capitol, Conference Room 225

in consideration of

HB 2460 HD 2
RELATING TO MICROGRIDS.

The Natural Energy Laboratory of Hawaii Authority (NELHA) supports HB 2460 HD 2 which enables microgrid demonstration projects in Hawaii.

The implementation of microgrid technology at NELHA has long been a key component of NELHA's Distributed Energy Resources (DER) strategy and its master plan which were recently updated in 2013 and 2011 respectively.

Many reports over the years have recognized that we provide an ideal location to address deployment challenges; provide power to pump seawater to the businesses in the park that require a continuous supply to avoid catastrophic losses; understand integration into the island-wide utility grid; and, perhaps most importantly how microgrids can help the island-wide grid.

73-4460 Queen Kaahumanu Hwy., #101, Kailua-Kona, Hawaii USA 96740-2637
Phone: (808) 327-9585 Fax: (808) 327-9586 Email: nelha@nelha.org Website: nelha.hawaii.gov

NELHA possesses a unique combination of physical infrastructure and access to clean energy resources. More specifically, NELHA's strategic location on Keahole Point results in our technology park being a self-contained "branch" served by two separate feeder lines from the main island-wide transmission grid. In addition, as a seawater utility, we operate three main pump stations throughout the park with a high electrical demand of approximately 1 MW. NELHA has many components of a microgrid due to its development in the early 80s which includes ownership of switchgear and transformers in the Research Campus and Farm Compound as well as the recent development of Supervisory Control and Data Acquisition System (SCADA) which includes a vast array of utility grade power monitoring devices, computer storage and display system. We also have many existing and planned renewable energy demonstration projects ranging from energy generation (ocean thermal energy conversion, concentrated solar power, PV, and biofuels) to energy storage (electrical energy storage test bed, and hydrogen production and storage).

We put considerable effort into building strategic relationships over the past several years with key players in this field including: Hawaiian Electric and Light Company (HELCO), State Energy Office, UH Natural Energy Institute; the County of Hawaii; National Renewable Energy Laboratory and Sandia National Laboratory. This has led to numerous projects and official MOU with HELCO, County of Hawaii and Sandia National Labs.

This measure would facilitate and accelerate the implementation of microgrid technology at NELHA by assisting us in applying for grant funding. In addition, while NELHA has assembled various microgrid components, this measure would allow NELHA to adopt a more comprehensive approach with respect to its DER by removing current limitations. Our vision is to deploy microgrid technology only within the park to serve our own demand from the

seawater pump stations and the park clients' needs. We do not intend to wheel electrical power outside of the park boundaries.

The lessons learned here at NELHA will be directly applicable to the rest of Hawaii to help in understanding the benefits of microgrids to island wide grids. In addition, it is important to note that a recent national study found that lower costs for electricity increases economic growth. It will also help fulfill NELHA's mission of economic development in West Hawaii by stabilizing electrical costs within the park, assisting with the commercialization of renewable energy technologies and diversifying the economy. Finally, it is important to note that microgrids can isolate themselves from the larger electricity grid in a time of emergency and thereby add energy resiliency into our communities, thereby increasing public safety and security.

Thank you for the opportunity to offer these comments.

P.O. Box 37158, Honolulu, Hawai`i 96837-0158
Phone: 927-0709 henry.lifeoftheland@gmail.com

COMMITTEE ON TRANSPORTATION AND ENERGY
Senator Lorraine R. Inouye, Chair
Senator Will Espero, Vice Chair

COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH
Senator Rosalyn H. Baker, Chair
Senator Jill N. Tokuda, Vice Chair

Monday, March 19, 2018
3:15pm
Conference Room 225

HB 2460 MICROGRIDS. **STRONG SUPPORT**

Aloha Chairs Inouye and Baker, Vice Chairs Espero and Tokuda, and Members of the Committes

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 47 years. 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.

Life of the Land stronly supports the bill but finds the language to be misleading:
How can the State learn lessons from a project that is exempt from State regulation?

Furthermore, the microgrid can operate in times of emergence when the HELCO grid fails, and in those times, it may be powered by 100 percent fossil fuel as noted in the proposed section (b)(6).

Mahalo
Henry Curtis, Executive Director

Hawaii Solar Energy Association
Serving Hawaii Since 1977

TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION
IN REGARD TO HB 2460 HD2, RELATING TO RENEWABLE ENERGY, MICROGRID DEMONSTRATION PROJECTS
BEFORE THE
SENATE COMMITTEE ON TRANSPORTATION AND ENERGY
AND THE
SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH
ON
MONDAY, MARCH 19TH, 2018

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

The HSEA was founded in 1977 to further solar energy and related arts, sciences and technologies with concern for the ecologic, social and economic fabric of the Hawaiian Islands. Our membership includes the vast majority of locally owned and operated solar installers, contractors, distributors, manufacturers, and inspectors across all islands.

The HSEA **supports** HB 2460 HD2. This measure seeks to create a microgrid demonstration project through the Natural Energy Laboratory of Hawaii (NELHA) that generates, stores, and distributes renewable energy on NELHA property.

Generally, renewable microgrid are a necessary part of Hawaii's energy infrastructure as the state grows closer to its goal of 100% renewable energy by 2045. A recent study by the Rocky Mountain Institute found that renewable microgrids in island communities reduces costs, build resiliency and grid stability, and contribute to the creation of a smarter grid.[1] An interesting case study of the island nation of Cuba, which ranks second in the world on installed distributed generation after Denmark, found that "microgrids at high-consuming locations could help to avoid transmission and distribution related losses as tourism, demand from private businesses, and strain on the grid grows."[2]

A microgrid, per this bill, is a small scale renewable energy electrical grid that produces, stores, and transmits electricity for use by consumers both on and off the NELHA property. By providing a test case for a resilient renewable microgrid that can provide

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[1] Bunker, Kaitlyn. "Renewable Microgrids: Profiles From Islands and Remote Communities Across the Globe." *OurEnergyPolicyorg Renewable Microgrids Profiles From Islands and Remote Communities Across the Globe Comments*, 1 Nov. 2015, www.ourenergypolicy.org/renewable-microgrids-profiles-from-islands-and-remote-communities-across-the-globe/.

[2] Panfil, et al. "What's next for Cuba's Electricity Sector?" *The Electricity Journal*, vol. 30, no. 8, 2017, pp. 38–44.

energy for consumers on and off site, the NELHA demonstration project sets an important benchmark for how microgrids could be constructed throughout the state. Utility dockets regarding distributed generation and community based renewable energy (CBRE) projects would benefit from a variety of data produced by this facility secondary to its energy producing and transmitting purposes.

An added benefit of legislation regarding microgrid, with HB 2460 in particular, is that they directly address the question of utility wheeling. Wheeling is the transmission of energy from within and electrical grid to an outside electrical load, typically via transmission lines. In many states, wheeling is allowed between utility generators and load receivers in a given service area. Capital costs are recovered through transmission fee mechanisms like transmission access fees. The question of how wheeling will be accomplished by microgrid operators to loads outside of their property lines will eventually need to be answered. The NELHA demonstration project outlined in HB 2460 allows energy consumers, developers, and utility operators the chance to observe and refine different mechanisms by which this might be accomplished within a controlled environment.

Now more than ever renewable microgrids that build resiliency and stability into island electrical grids should be seriously considered as a path to 100% RPS by 2045. In the wake of Hurricane Maria, Puerto Rico released proposed rules on microgrid development to strengthen its grid against extreme weather.[3] As of last month more than 30% of Puerto Ricans are without electricity.[4] Puerto Rico is a wake up call for Hawaii. As a state we must decide if we are going to stand by and wait until a major disaster hits our islands, or be proactive with intelligent and timely energy policy.

We **strongly support** HB 2460 HD2 and we urge this committee to pass this measure.

Thank you for the opportunity to testify.

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[3] Staff, PREC. *REGULATION ON MICROGRID DEVELOPMENT*. MI ed., CEPR, ser. 0001, 2018, *REGULATION ON MICROGRID DEVELOPMENT*.

[4] Savransky, Rebecca. "Nearly Half a Million Customers Are Still without Power in Puerto Rico."*TheHill*, 25 Jan. 2018, thehill.com/blogs/blog-briefing-room/news/370744-nearly-half-a-million-customers-still-dont-have-power-in-puerto.

Email: communications@ulupono.com

SENATE COMMITTEES ON TRANSPORTATION & ENERGY AND COMMERCE, CONSUMER PROTECTION, & HEALTH
Monday, March 19, 2018 — 3:15 p.m. — Room 225

Ulupono Initiative Strongly Supports HB 2460 HD 2 with an Amendment, Relating to Microgrids

Dear Chair Inouye, Vice Chair Espero, Chair Baker, Vice Chair Tokuda, 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 2460 HD 2 with an Amendment, which establishes a Natural Energy Laboratory of Hawai'i Authority (NELHA) microgrid demonstration project, because it aligns with our goal of increasing the production of clean, renewable energy in Hawai'i.

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 businesses that rely upon a continuous supply of electricity from a microgrid, such as hospitals and hotels, certain microgrids need to sell their power to those businesses without being considered a public utility.

NELHA in Kailua-Kona is an excellent example of this, where the fisheries businesses would suffer catastrophic losses in the event of power loss, and it is cheaper to provide reliability for the microgrid than the individual business. NELHA is an important center of aquaculture and energy innovation that has demonstrated that a state authority can be

effective and profitable at promoting innovation and commerce. NELHA already demonstrates the state's only operational Ocean Thermal Energy Conversion facility, seawater cooling, and an innovative solar gateway center. NELHA will soon be demonstrating grid side storage technology in partnership with HELCO, Sandia Labs, and Ulupono. It is important to NELHA's expansion and for the economic security of the commercial tenants to have continuous power, which will be enabled by a microgrid. For all of these reasons, the provisions in this bill are highly desirable.

The legislation should ensure that enabling microgrids does not cause grid defection without the appropriate exit charges to guarantee the remaining grid customers are not harmed. This can be addressed by amending 269 (e) to read:

(e) "The Public Utilities Commission may take any steps the commission deems necessary to enable and compel electric public utilities to allow the development of the natural energy laboratory of Hawaii authority microgrid demonstration project by non-utilities. These steps may include issuing related orders, amending or adopting related rules, working with permitting agencies or other authorities to grant exemptions, or other steps necessary to enable the development of the natural energy laboratory of Hawaii authority microgrid demonstration project." Starting on page 5, line 17, add, <u>"The Public Utilities Commission shall determine what exit charges are necessary to prevent the remaining ratepayers from paying for the embedded costs that would have otherwise been paid by the microgrid customers."</u>

In addition, this legislation provides the utility, regulators, and stakeholders with a test case for microgrids, which may contribute to supporting the state's energy goals.

As Hawai'i's energy issues become more complex and challenging, we appreciate these committees' efforts to look at policies that support renewable energy production.

Thank you for this opportunity to testify.

Respectfully,

Kyle Datta
General Partner

ORGANIZING *for* ACTION

To: The Senate Committee on Transportation and Energy
From: Brodie Lockard, OFA Hawaii, 262-1285
Date: Monday, March 19, 2018

In support of HB 2460 HD2

Dear Chair Inouye, Vice Chair Espero and Committee members--

I am the Hawaii Climate Lead for Organizing for Action, a progressive group that played a lead in electing President Barack Obama twice. OFA Hawaii supports HB 2460 HD2.

Microgrids hold great potential as a way for small groups of energy users--an apartment complex, a hotel, a school campus--to produce their own energy and be self-sufficient in an emergency.

Now more than ever, renewable microgrids that build resiliency and stability into island electrical grids should be seriously considered as part of our path to a 100% RPS by 2045. Hurricane Maria and the devastation it left in Puerto Rico are a wake-up call for Hawaii to become more proactive in our energy policy.

Microgrids provide greater resilience because they can separate from the main electricity grid if it fails. 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.

HB2460 HD2 will help Hawaii become energy self-sufficient.

Thank you for this opportunity to submit testimony.

Brodie Lockard
Hawaii Climate Lead, Organizing for Action

To: The Senate Committee on Transportation and Energy
From: Sherry Pollack, 350Hawaii.org
Date: Monday, March 19, 2018

In support of HB 2460 HD2

Dear Chair Inouye, Vice Chair Espero and Committee members--

I am the Vice President of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org supports HB 2460 HD2.

Microgrids hold great potential as a way for small groups of energy users--an apartment complex, a hotel, a school campus--to produce their own energy and be self-sufficient in an emergency.

Now more than ever, renewable microgrids that build resiliency and stability into island electrical grids should be seriously considered as part of our path to a 100% RPS by 2045. Hurricane Maria and the devastation it left in Puerto Rico are a wake-up call for Hawaii to become more proactive in our energy policy.

Microgrids provide greater resilience because they can separate from the main electricity grid if it fails. 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.

HB2460 HD2 will help Hawaii become energy self-sufficient.

Thank you for this opportunity to submit testimony.

Sherry Pollack
Vice President, 350Hawaii.org

HB-2460-HD-2
Submitted on: 3/18/2018 9:54:07 PM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	Testifying for OCC Legislative Priorities Committee, Democratic Party of Hawai'i	Support	No

Comments:

To the Honorable Lorraine R. Inouye, Chair; the Honorable Will Espero, Vice-Chair, and Members of the Committee on Transportation and Energy:

To the Honorable Rosalyn H. Baker, Chair; the Honorable Jill N. Tokuda, Vice-Chair, and Members of the Committee on Commerce, Consumer Protection and Health:

Good afternoon, my name is Melodie Aduja. I serve as Chair of the Oahu County Committee ("OCC") on Legislative Priorities of the Democratic Party of Hawaii. Thank you for the opportunity to provide written testimony on **HB2460 HD2**, relating to Energy Resiliency; and the Microgrid Services Tariff.

The OCC Legislative Priorities Committee is in favor of **HB2460 HD2** and support its passage.

HB2460 HD2, is in alignment with the Platform of the Democratic Party of Hawai'i ("DPH"), 2016, as it authorizes the establishment of a Natural Energy Laboratory of Hawaii Authority (NELHA) microgrid demonstration project for the generation, storage, and distribution of renewable energy on property controlled by NELHA.

The DPH Platform states that "Electricity rates in Hawai'i are among the highest in the nation despite the fact that we enjoy an abundance of sunshine year-round. Electric utility companies and cooperatives must open the grid to alternative power sources including solar panels and geothermal energy. We support the effort of our government officials to require utilities to provide for the maximum, comprehensive, integrated use of renewable energy and associated technologies such as storage and smart grid technologies." (Platform of the DPH, P. 9, Lines 458-462 (2016)).

Given that **HB2460 HD2** authorizes the establishment of a Natural Energy Laboratory of Hawaii Authority (NELHA) microgrid demonstration project for the generation, storage, and distribution of renewable energy on property controlled by NELHA, it is the position of the OCC Legislative Priorities Committee to support this measure.

Thank you very much for your kind consideration.

Sincerely yours,
/s/ Melodie Aduja
Melodie Aduja, Chair, OCC Legislative Priorities Committee
Email: legislativepriorities@gmail.com, Text/Tel.: (808) 258-8889

SIERRA STUDENT COALITION

HB2460

Renewable Energy; Microgrid Demonstration Project

March 19 2018

Relating to Microgrids

Aloha Chairs Inouye, Baker, Vice Chairs Espero, Tokuda, and members of the committee. The Sierra Student Coalition stands in support of HB2460 on renewable energy; microgrid demonstration project.

HB2460 is imperative for Hawai'i to reach its goal of 100% renewable energy by 2045. The establishment of a Natural Energy Laboratory of Hawaii Authority (NELHA) microgrid demonstration project for the generation, storage, and distribution of renewable energy on property controlled by NELHA will open the door for the for the establishment of many more sites such as this one which will push this state in the direction it chose when adopting the Paris Climate Accords.

Microgrids help create clean forms of energy independently from electric corporation and separate from the electricity grid if it were to fail. Hawai'i and the planet needs more forms of renewable energy now than ever. Clean renewable energy is one of the greatest ways to combat climate change with the reduction of Carbon Dioxide in the air, and less reliance on fossil fuels. The benefits for HB2460 cannot be overlooked.

Thank you for allowing the Sierra Student Coalition to testify.

SIERRA CLUB OF HAWAIʻI
MĀLAMA I KA HONUA. Cherish the Earth.

SENATE COMMITTEE ON TRANSPORTATION AND ENERGY

SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH

Monday, March 19, 2018 3:15PM Conference Room 225

In STRONG SUPPORT of HB 2460 HD2 Relating to microgrids

Aloha Chairs Inouye and Baker, Vice Chairs Espero and Tokuda and members of the Committees,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawaiʻi, a member of the Common Good Coalition, **strongly supports HB 2460 HD2**, which seeks to create a microgrid demonstration project through the Natural Energy Laboratory of Hawaii (NELHA) that generates, stores, and distributes renewable energy on NELHA property.

In general, the Sierra Club of Hawaiʻi *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 2460 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.

The NELHA microgrid demonstration project also allows the study of various impacts associated with the development of microgrids, such as utility wheeling, time-of- use export tariffs, and grid services. This project also helps stimulate local economies by providing good paying jobs and lower energy costs, lowering the energy cost burden in the area, and contributing renewable generation at scale to the state.

Although not specifically called out within the statute as written, *we propose that any energy generated by this project and sold to off-site consumers be prioritized for low and middle income communities, Department 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.

Thank you for the opportunity to testify in **strong support of HD 2460 HD2**.

HB-2460-HD-2
Submitted on: 3/17/2018 4:17:59 PM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Benton Kealii Pang, Ph.D.	Individual	Support	No

Comments:

HB-2460-HD-2
Submitted on: 3/18/2018 1:54:26 AM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jun Shin	Individual	Support	No

Comments:

Aloha Chairs Inouye and Baker, Vice Chairs Espero and Tokuda, and members of the Committees,

My name is Jun Shin, I am a Freshman at the University of Manoa, a board member at-large for Young Progressives Demanding Action - Hawaii and I live in House District 26. I am in **STRONG SUPPORT** of HB2460 HD2 that moves Hawai‘i toward our goal of 100% renewable energy by 2045. We have a long way to go and many things to do before we reach this admirable and ambitious goal, which showcases to the world our commitment to combat climate change and preserve our beautiful planet for generations to come. This measure is one of several that will contribute to these important efforts. I urge the committees to pass this bill!

Mahalo for the opportunity to testify today.

Jun

Board Member At- Large

Young Progressives Demanding Action - Hawaii

808-255-6663

HB-2460-HD-2
Submitted on: 3/17/2018 12:27:19 PM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Michele Nihipali	Individual	Support	No

Comments:

Aloha Chairs Inouye and Baker, Vice Chairs Espero and Tokuda, and members of the Committees,

My name is Michele Nihipali and I live in Hauula. I am in **STRONG SUPPORT** of this important bill that moves Hawai‘i toward our goal of 100% renewable energy by 2045. We have a long way to go and many things to do before we reach this admirable and ambitious goal, which showcases to the world our commitment to combat climate change and preserve our beautiful planet for generations to come. This measure is one of several that will contribute to these important efforts. We need to prepare our electrical grid for any emergency or natural disaster. I urge the committees to pass this bill!

Mahalo for the opportunity to testify today.

Michele Nihipali

54-074 A Kam Hwy.

Hauula, HI 96717

HB-2460-HD-2
Submitted on: 3/18/2018 12:12:04 PM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Denise Boisvert	Individual	Support	No

Comments:

I strongly support HB2460 to fund a microgrid demonstration project at the NELHA facility because microgrids will play a crucial role in accomplishing the State's push toward 100% renewable energy.

Sincerely,

Denise Boisvert

Waikiki

HB-2460-HD-2
Submitted on: 3/18/2018 12:41:29 PM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Susan Douglas	Individual	Support	No

Comments:

HB-2460-HD-2
Submitted on: 3/18/2018 1:35:44 PM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Kim Jorgensen	Individual	Support	No

Comments:

Thank you for this opportunity to provide my testimony of support of HB2460.

This microgrid demonstration project at the NELHA facility will play an important part in the success of our state's push toward 100% renewable energy.

HB-2460-HD-2
Submitted on: 3/18/2018 7:40:28 PM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Philipp LaHaela Walter	Individual	Support	No

Comments:

Aloha Chairs Inouye and Baker, Vice Chairs Espero and Tokuda, and members of the Committees,

My name is Philipp LaHaela Walter and I live in Moiliili, Honolulu. I am in **STRONG SUPPORT** of this important bill that moves Hawai‘i toward our goal of 100% renewable energy by 2045. We have a long way to go and many things to do before we reach this admirable and ambitious goal, which showcases to the world our commitment to combat climate change and preserve our beautiful planet for generations to come. This measure is one of several that will contribute to these important efforts. I urge the committees to pass this bill!

Mahalo for the opportunity to testify today.

HB-2460-HD-2
Submitted on: 3/18/2018 8:49:50 PM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Randy Ching	Individual	Support	No

Comments:

Aloha Chairs Inouye and Baker, Vice Chairs Espero and Tokuda, and members of the Committees,

I am in **STRONG SUPPORT** of HB2460 HD2. We need to distribute energy generation -- microgrids are an example of this. NELHA is a great place to test this concept. Hawaii needs to move away from one main power supplier (HECO) because we are too vulnerable to both manmade and natural disasters. With microgrids, power generation would not depend on just one electricity plant like Kahei Power Plant. Much better to spread the risk around.

Thank you for the opportunity to testify.

Randy Ching / Honolulu

HB-2460-HD-2
Submitted on: 3/19/2018 12:43:18 AM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Pappas	Individual	Support	No

Comments:

HB-2460-HD-2
Submitted on: 3/19/2018 10:18:06 AM
Testimony for TRE on 3/19/2018 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Kylie Cruz	Individual	Support	No

Comments:

I live in Sen. Ihara's district and strongly support this bill.

Kylie Wager Cruz

HB2460

Renewable Energy; Microgrid Demonstration Project

March 19 2018

Relating to Microgrids

Aloha Chairs Inouye, Baker, Vice Chairs Espero, Tokuda, and members of the committee. My name is Maxim Poudrier-Tudan and I stand in support of HB2460 on renewable energy; microgrid demonstration project.

HB2460 is imperative for Hawai'i to reach its goal of 100% renewable energy by 2045. The establishment of a Natural Energy Laboratory of Hawaii Authority (NELHA) microgrid demonstration project for the generation, storage, and distribution of renewable energy on property controlled by NELHA will open the door for the for the establishment of many more sites such as this one which will push this state in the direction it chose when adopting the Paris Climate Accords.

Microgrids help create clean forms of energy independently from electric corporation and separate from the electricity grid if it were to fail. Hawai'i and the planet needs more forms of renewable energy now than ever. Clean renewable energy is one of the greatest ways to combat climate change with the reduction of Carbon Dioxide in the air, and less reliance on fossil fuels. The benefits for HB2460 cannot be overlooked.

Thank you for allowing testimony.