# HB 1942, HD1

Measure Title:

RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST WITH THE PLANNING, DESIGN, CONSTRUCTION,

EQUIPPING, LAND LEASES, AND OTHER TANGIBLE ASSETS FOR A RENEWABLE ENERGY PROJECT WITH ENERGY STORAGE TECHNOLOGY

ON THE ISLAND OF MOLOKAI.

Report Title:

Special Purpose Revenue Bonds; Princeton Energy Group or Related Special Purpose Entity; Renewable Energy Project; Energy Storage

Technology (\$)

Description:

Authorizes the issuance of special purpose revenue bonds to assist Princeton Energy Group or a related special purpose entity with the financing and refinancing costs relating to the planning, design, and construction of a renewable energy project with energy storage technology on the island of Molokai. Effective July 1, 2050. (HB1942 HD1)

# TESTIMONY BY KALBERT K. YOUNG DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE STATE OF HAWAII TO THE SENATE COMMITTEE ON ENERGY AND ENVIRONMENT ON HOUSE BILL NO. 1942, H.D. 1

March 11, 2014

RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST WITH THE PLANNING, DESIGN, CONSTRUCTION, EQUIPPING, LAND LEASES, AND OTHER TANIGIBLE ASSETS FOR A RENEWABLE ENERGY PROJECT WITH ENERGY STORAGE TECHNOLOGY ON THE ISLAND OF MOLOKAL

House Bill No. 1942, H.D. 1, authorizes the issuance of special purpose revenue bonds (SPRB) to assist Princeton Energy Group or a related special purpose entity with the financing and refinancing of costs relating to the planning, design, and construction of a renewable energy project with energy storage technology on the island of Molokai pursuant to Part V, Chapter 39A, Hawaii Revised Statutes.

The Department would like to advise the Legislature and prospective issuers that should the legislation be approved, approval of SPRB issuance will still require further discussion and satisfactory review of the financing components involved in the transaction.

Thank you for the opportunity to provide testimony on this measure.



# SENATE COMMITTEE ON ENERGY & ENVIRONMENT Tuesday, March 11, 2014 – 2:45 p.m. – Room 225

Ulupono Initiative <u>Strongly Supports</u> of HB 1942 HD 1, Relating to the Issuance of Special Purpose Revenue Bonds to assist with the Planning, Design, Construction, Equipping, Land Leases, and other Tangible Assets for a Renewable Energy Project with Energy Storage Technology on the Island of Molokai

Dear Chair Gabbard, Vice Chair Ruderman and Members of the Committee:

My name is Murray Clay and I am managing 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 grown food, increase renewable energy, and reduce/recycle waste. Ulupono invests in projects that have the potential to create large-scale, innovative change.

Ulupono strongly supports HB 1942 HD 1, which authorizes the issuance of special purpose revenue bonds to assist Princeton Energy Group. Ulupono would like to see as much renewable energy production as possible. However, the electrical grid can only handle a finite amount of intermittent renewable energy production sources such as solar and wind. As intermittent power is reaching its cap on Molokai, a feasible solution is energy storage. If energy storage projects were successfully developed, there would be increased grid reliability and resilience. Therefore, more local renewable energy can be generated on Molokai to offset imported fossil fuel based energy generation. Energy storage projects would greatly benefit the residents of Molokai.

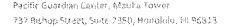
Ulupono is looking to invest in energy storage projects as we believe they could make a significant difference in helping Hawai'i reduce its dependence on fossil fuels.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay Managing Partner

Email: communications@ulupono.com







P.O. Box 37158, Honolulu, Hawai`i 96837-0158 Phone: 927-0709; E: <a href="mailto:henry.lifeoftheland@gmail.com">henry.lifeoftheland@gmail.com</a>

COMMITTEE ON ENERGY AND ENVIRONMENT Senator Mike Gabbard, Chair Senator Russell E. Ruderman, Vice Chair

DATE: Tuesday, March 11, 2014

TIME: 2:45 p.m.

PLACE: Conference Room 225

HB 1942 HD 1 SPRBs for Moloka'i Renewable Energy Project

**SUPPORT** 

Aloha Chair Gabbard, Vice Chair Ruderman, and Members of the Committee

Life of the Land is 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.

The Moloka'i community is very engaged in and supportive of the possibility of creating a Moloka'i powered by 100% renewable indigenous environmentally and culturally friendly energy sources. We fully support their efforts.

This bill authorizes Special Purpose Revenue Bonds (SPRBs) for a Moloka'i renewable energy and storage project. We have seen absolutely nothing that would support a viable project by Princeton.

However, Section 2 of the bill states, "for the purpose of assisting Princeton Energy Group ... <u>OR</u> a special purpose entity established for the purpose of constructing the renewable energy project with energy storage technology on Molokai"

We fully support the use of the word "OR."

## Testimony to the Senate Committee on Energy and Environment Tuesday, March 11, 2014 at 2:45 P.M. Conference Room 225, State Capitol

RE: HOUSE BILL 1942 HD1 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST WITH THE PLANNING, DESIGN, CONSTRUCTION, EQUIPPING, LAND LEASES, AND OTHER TANGIBLE ASSETS FOR A RENEWABLE ENERGY PROJECT WITH ENERGY STORAGE TECHNOLOGY ON THE ISLAND OF MOLOKAI

Chair Gabbard, Vice Chair Ruderman, and Members of the Committee:

The Chamber of Commerce of Hawaii ("The Chamber") supports HB 1942 HD1 which authorizes the issuance of special purpose revenue bonds to assist Princeton Energy Group or a related special purpose entity with the financing and refinancing costs relating to the planning, design, and construction of a renewable energy project with energy storage technology on the island of Molokai.

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

The Ikehu Molokai Project seeks to make Molokai a prime example of renewable energy through this multi-megawatt renewable energy project and storage technology; this would move Molokai off of fossil fuels and significantly reduce the island's carbon footprint. Additionally, this project provides great benefits to the community by stabilizing the electrical grid and bringing electric rates down.

The SPRBs provided by this measure would provide much-needed financial support for this innovative project. The funds authorized for this Ikehu Molokai project would help Molokai take the first step to moving an electric grid of this capacity from 100% carbon-based fuels to 100% renewable energy. This project's success would be the first of many for Hawaii to provide more self-sufficient energy and lower electrical costs.

Thank you for the opportunity to testify.



March 10, 2014

Senate Committee on Energy and the Environment Senator Mike Gabbard, Chair Senator Russel E. Ruderman, Vice Chair

RE: HB 1942 HD 1 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO WITH THE PLANNING, DESIGN, CONSTRUCTION, EQUIPPING, LAND LEASES, AND OTHER TANGIBLE ASSETS FOR A RENEWABLE ENERGY PROJECT WITH ENERGY STORAGE TECHNOLOGY ON THE ISLAND OF MOLOKA!.

Aloha Chari Gabbard, Vice-Chair Ruderman and the members of the Hawaii Senate,

My name is Emillia Noordhoek and I am the Executive Director and Co-founder of Sust 'aina ble Molokai a grassroots organization working on island since 2009. Sust 'ainable Molokai's mission is to maintain our island's rich culture and historic legacy of `āina momona (abundant land) and embrace modern pathways to a sustainable future. Our objectives include creating an environmentally, economically, and culturally sustainable and self-sufficient island that serves as a model for Hawai'i and the world. We focus on education, training, and advocacy; identify existing community assets and inherent challenges; and fill complementary roles that advance local efforts.

We have recently completed and will soon publish our Molokai Energy Assessment, a comprehensive assessment of energy data collected specifically from the Molokai community. One of our key findings from surveys given to community members as well as personal interviews was that an overwhelming number support small to medium sized solar projects that directly provide energy to the community at large.

The Princeton Energy Group is proposing a project, the Ikehu Project, that if completed and implemented with the best interests of the community would make Molokai a model of renewable energy and sustainability for the State of Hawai'i and fit the above perimeters that the community desires.

While there are many details of the project that have yet to be made public due to being in the preliminary stages, Princeton Energy Group has shown a willingness and desire to engage the community in a open, transparent, process when further details and plans are made public.

We support House Bill 1942 HD1 which authorizes the issuance of special purpose revenue bonds to assist Princeton Energy Group, with the stipulation that they continue to be completely engaged in all aspects of the process through community supported meetings.

Secure financing will be key to the success of any project of this scale and with so many potential benefits for the community from this project we feel that it is in the best interest of the community to support this opportunity to receive an allocation of the Special Purpose Revenue Bonds.

Sust 'aina ble Molokai looks forward to working with our community to help facilitate planning for renewable energy projects that benefit residents and businesses on Molokai.

Thank you for this opportunity to testify.

Respectfully Submitted,

Emillia Noordhoek Executive Director



## ENERVAULT'S TESTIMONY IN SUPPORT OF HB 1942, HD1

#### SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

Good morning Chair Gabbard, Vice Chair Ruderman, and members of the Committee:

ENERVAULT supports HB1942, HD1 and respectfully requests that the Committee pass it out without a defective date.

EnerVault designs and manufactures long-duration, grid-scale energy storage systems based on iron-chromium redox flow battery technology first pioneered by NASA. EnerVault's energy storage systems both absorb and deliver energy into the grid cost effectively to manage grid efficiency, improve reliability, and integrate variable renewable energy resources. Based in the Silicon Valley, EnerVault is the first company to deploy megawatt-hour scale iron-chromium flow battery systems in field operations. For more information, visit www.EnerVault.com

We are currently considering a role in the integration of a multi-hour, safe, reliable and cost effective energy storage system to support a high penetration of renewable resources in the Ikehu Molokai project, being developed by Princeton Energy Group. This is the project described in HB 1942, HD1 as the "multi-megawatt renewable energy project with energy storage technology near Kaunakakai to exclusively serve the island of Molokai". The island of Molokai suffers from very high electric rates, a grid that is unstable electrically, and a large carbon footprint. The Ikehu Molokai project aims to solve these problems by converting the island's electric system to 100% renewable energy. This is an exciting project for us and one of which the island will receive both national and international recognition in demonstrating the realizable goal, of cost effective, clean energy.

HB1942, HD1 is vitally important to the success of the Ikehu Molokai project. The high degree of renewable penetration called for by the project requires a large capital expense, including a robust energy storage component. The capital expense for the Ikehu Molokai project is quite high on a \$/MW basis. The high capital expense can be ameliorated with the benefit of long-term financing at reasonable interest rates, which the SPRBs authorized by HB 1942, HD1 will provide.

Therefore, we respectfully request that this measure be passed out.

Thank you for the opportunity to testify.

Sincerely,

Craig R. Horne, Ph.D. Chief Strategy Officer & Co-Founder EnerVault

9 March 2014



# TESTIMONY IN SUPPORT OF HB 1942, HD1 SENATE COMMITTEE ON ENERGY & ENVIRONMENT

Tuesday, March 11, 2014 at 2:45pm Conf. Room 225

Testifier: Clay R. Rumbaoa - CEO, Molokai Properties Limited (dba Molokai Ranch)

Goodafternoon & Aloha Chair Gabbard, Vice Chair Ruderman and Committee Members:

Molokai Ranch supports HB 1942, HD1. This bill will greatly assist Princeton Energy Group (PEG) to implement "Ikehu Molokai". Molokai ratepayers pay one of the highest electricity rates in Hawaii, ranging from \$0.48 to \$0.52 per kwh. The primary goal of this project is to provide rate relief for the residents and businesses of Molokai, stabilize the Molokai electrical grid, reduce the island's carbon footprint and help the State meet its mandate for renewable energy.

PEG have held numerous community meetings with groups across Molokai and have encouraged participation and questions. They have openly and thoughtfully followed up on suggestions to improve the project, including suggested changes to its technology and location. As an example, the project initially included a pump hydro storage system, but after receiving helpful feedback from the Molokai community and conducting follow up economic analysis they have found that a flow battery storage component would be preferable, addressing the issues raised and provide more rate relief than the original system. Molokai Ranch supports this potential change and their continuous research to ensure that they are developing the best renewable energy project for Molokai.

This potential storage technology shift has caused some community groups to show concern for the overall project. However, Molokai Ranch believes that this change is a positive step for the project and for Molokai. PEG has demonstrated their commitment to working with the Molokai community. They have stated that they will continue engaging with the community in the same manner and will share any changes as soon as they arise. Molokai Ranch is confident in this approach and believes that the end result will positively impact all elements of Molokai life.

Therefore, we respectfully request that HB 1942, HD1 be passed out of committee.

Mahalo,

Clay R. Rumbaoa

Clay R. Rumbaoa

## PRINCETON ENERGY GROUP

Innovation in Renewable Energy

STEVE TABER Chairman and CEO

# PRINCETON ENERGY GROUP'S TESTIMONY IN SUPPORT OF HB 1942 HD1

#### SENATE COMMITTEE ON ENERGY AND ENVIRONMENT Tuesday, March 11, 2014 at 2:45PM

Good afternoon Chair Gabbard, Vice chair Ruderman, and members of the Committee:

We are currently engaged in the Ikehu Molokai Project. This is the project described in HB 1942, HD1 as the "multi-megawatt renewable energy project with energy storage technology near Kaunakakai to exclusively serve the island of Molokai". The island of Molokai suffers from very high electric rates, a grid that is unstable electrically, and a large carbon footprint. The Ikehu Molokai project aims to solve these problems by converting the island's electric system to 100% renewable energy. This effort will require a mix of technologies and multiple phases, and it will be the work of several years. Nevertheless, we are committed to the success of the project. No modern electric grid of this significance has been converted from 100% carbon-based fuels to 100% renewable energy, so the Ikehu Molokai project will serve as an example of high levels of renewable energy penetration, while keeping rates affordable and the grid stable. As such, Molokai and Hawaii will serve as an example to other islands and to utilities and policy-makers all over the world.

In response to the PUC's "No Regrets" policy, we are analyzing the full range of renewable energy technologies to arrive at the most cost-effective project design. The technologies we have analyzed include solar photovoltaics, dispatchable solar thermal energy, utility-scale wind turbines, small-scale wind turbines, direct combustion biomass and waste to energy, gasified biomass and waste to energy, vanadium flow batteries, iron-chromium batteries, pumped storage hydroelectric, compressed air energy storage, smart grid technologies, end use efficiency, and other technologies. We have also looked briefly at geothermal energy but rejected it because the geothermal resource on Molokai is poor, and we have looked at high-energy-density batteries but rejected them because of the fire risk.

The first phase of the project is projected to get the island to 50% or more renewable penetration, using photovoltaic generation, coupled with end use energy efficiency measures. In addition to the solar generation, we will install a robust storage resource. We had originally planned a pumped storage hydroelectric resource, located near Manila Camp in Kaunakakai, but in response to concerns voiced by residents of Manila Camp, we are also investigating a

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www.princetonenergy.net

quieter storage technology, flow batteries, and a relocation of the equipment to the industrial park, remote from residential areas. The storage equipment, whether batteries, compressed air, or pumped storage, will help to keep the grid stable as more residents install rooftop PV panels, so the Ikehu project will support the build out of the maximum possible behind-themeter, rooftop photovoltaic generation. Also, by stabilizing the grid, the storage resource, together with the battery project currently being planned by MECo and HNEI, will reduce the frequent blackouts and brownouts that plague Molokai. Finally, it will enable MECo to reduce the run time and part load operation of the existing diesel generators, extending the life of the diesel generators. The second phase of the project, which has not yet been designed, will aim to get the island to 100% renewables.

We are committed to shaping the Ikehu Molokai project in response to the concerns of the island's residents. We have held a dozen or so meetings with community groups on Molokai, meeting with hundreds of the island's residents. We will continue with these meetings throughout the development period. The residents have raised numerous issues, including noise from generating equipment, visual impact from wind turbines, traffic, impact on water resources, etc. The residents have also offered many valuable suggestions about how to shape the project better. We have are working to adjust the mix of technologies, the location of the project, and other factors in response to concerns voiced by the community. We expect to have the support of a strong majority of Molokai's residents solidified within the next 60 to 90 days, following the next round of meetings to be held on the island in March-April.

The economic impact of the SPRB allocation for the Ikehu Molokai project will be strongly positive. We expect the project to lead to reduction in electricity rates for the residents of 5 to 8 cents per kWh. Over the 20 year life of the energy storage equipment, this will result in savings to the residents of at least \$20 million. In addition, over the same period, the renewable energy/energy storage project will create at least 200 person-years of jobs on the island, representing at least \$10,000,000 in direct economic activity and about 3 times that much, or \$30,000,000, in indirect economic activity. Furthermore, in the case of Molokai, the reduced electricity costs will make water more affordable for homesteaders and Molokai businesses more competitive, which will also stimulate economic activity.

HB1942, HD1 is vitally important to the success of the Ikehu Molokai project. The high degree of renewable penetration called for by the project requires a large capital expense, including a robust energy storage component. Energy storage has been implemented with renewable projects on other islands, but in much smaller increments than will be required for Molokai. The capital expense for the Ikehu Molokai project is quite high on a \$/MW basis. We can overcome the high capital expense with the benefit of long-term financing at reasonable interest rates, which the SPRBs authorized by HB 1942, HD1 will provide. To further this process, we have submitted the business plan/pro forma for the project to Budget & Finance and to DBEDT for their review and held follow-up discussions with them. B&F has provided the attached letter concerning the Ikehu Molokai project. DBEDT is currently engaged in internal deliberations about their protocol for providing letters to SPRB bills in general.

We are requesting the authorization of the Special Purpose Revenue Bonds at this time so as to maximize the rate relief for Molokai residents and businesses. The federal government currently offers an incentive of 30% of the cost of a solar project; this is essential

for maximizing the rate relief made possible by the Ikehu Molokai project. To qualify for the incentive, however, a project must be completed by 2016. If the bond authorization were postponed until the next legislative session, it would be impossible to complete the project by 2016.

Therefore, we respectfully request that this measure be passed out and the defective date removed.

Thank you for the opportunity to testify.

Sincerely, **Princeton Energy Group** 

Steve Taber Chairman & CEO

Princeton Energy Group is a company of renewable energy veterans deploying renewable energy projects and technologies around the world. The mission of the Princeton Energy Group is to expand the reach of renewable energy and energy efficiency in the marketplace through innovation in technology, business models, and financing techniques. We bring to every task exceptionally qualified individuals, skilled in finding unique resource and business solutions to difficult problems. The founders of Princeton have been at the forefront of the renewable energy industry since its early days in the 1970s in California. In addition to our for-profit activities through Princeton Energy Group, we have held influential positions in state and federal government and have served in the non-profit sector.

9 March 2014

NEIL ABERCROMBIE



KALBERT K. YOUNG DIRECTOR

LUIS P. SALAVERIA DEPUTY DIRECTOR

# STATE OF HAWAII DEPARTMENT OF BUDGET AND FINANCE P.O. BOX 150

P.O. BOX 150 HONOLULU, HAWAII 96810-0150 ADMINISTRATIVE AND RESEARCH OFFICE BUDGET, PROGRAM PLANKING AND MANAGEMENT DIVISION FINANCIAL ADMINISTRATION DIVISION OFFICE OF FEDERAL AWARDS MANAGEMENT

February 24, 2014

Ms. Kumiko Yoshinari, PhD, CFA Director, Public Finance Princeton Energy Group P.O. Box 1155 Sausalito, CA 94965

Dear Ms. Yoshinari:

EMPLOYEES PETIREMENT SYSTEM HAWAII EMPLOYER UNION REALTH GENEFITS TRUST FUND OFFICE OF THE PUBLIC DEFENDER PUBLIC D'HISTIES COMMISSION

Subject:

Ikehu Molokai

Special Purpose Revenue Bonds

This letter is in response to requests from yourself and Senator Gabbard's office. The Department of Budget and Finance (the "Department") reviewed, without rendering an opinion, Princeton Energy Group's Executive Summary, Powerpoint Presentation, and Financial Projections for Ikehu Molokai (the "Project"). According to the documentation reviewed, Princeton Energy Group is an experienced developer of renewable energy and energy efficiency projects worldwide, as well as a leader in energy policy. The Department will continue to work with the Princeton Energy Group as this Project progresses.

Please be advised that pursuant to Section 39A-154(b), HRS, and Chapter 6-10, Hawaii Administrative Rules, the Department is required, among other things, to determine whether the Princeton Energy Group is a responsible party in order to issue the bonds. In particular, Section 39A-154(b), HRS, states:

- "(b) The department shall not enter into any project agreement with respect to any project unless the legislature shall have first authorized the issuance of special purpose revenue bonds to finance the project pursuant to section 39A-157 and the department has determined that:
- (1) The project party is a responsible party, whether by reason of economic assets or experience in the type of enterprise to be undertaken through the project, or otherwise; or

Ms. Kumiko Yoshinari February 24, 2014 Page 2

(2) The obligations of the project party under the project agreement will be unconditionally guaranteed by a person who is a responsible party, whether by reason of economic assets or experience in the type of enterprise to be undertaken through the project, or otherwise."

Thank you for giving the Department the opportunity to review documentation on the Ikehu Molokai Project. Should you have any questions, please call Scott Kami, Administrator, Financial Administration Division, at 586-1612.

Sincerely,

KALBERT/K/YOUNG

Director of Finance

c: Senator Mike Gabbard

#### Michael Mangana's Testimony in Support of HB 1942, HD1

Senate Committee on Energy and Environment; March 11, 2014 at 2:45p.m.

Aloha Chair Gabbard, Vice Chair Ruderman, and members of the Committee,

As you all may know, the Hawaii Legislative session has on its agenda this year is a bill that will impact the Ikehu Molokai project, and could lower the cost of electricity for Molokai residents. The bill is <a href="HB1942">HB1942</a>, HD1</a> which sets aside Special Purpose Revenue Bonds (SPRBs) for the Ikehu project, bringing down the cost to finance its initial construction.

HB 1942, HD1, if passed, will reduce the cost of generating electricity on Molokai for the Ikehu project. As stated by MECo, reduced generation costs will be passed on to the consumer. I support HB 1942, HD1 and hope you will as well.

Mahalo for all your efforts to promote renewable energy and reduced electricity rates on Molokai.

Mike Mangana

P.O. BOX 1980

KAUNAKAKAI, MOLOKAI, HAWAII 96748

Michael Mangana [mailto:michaelmangana@citlink.net]

#### Personal Testimony Submitted March 10, 2014

TO:

#### COMMITTEE ON ENERGY AND ENVIRONMENT

Senator Mike Gabbard, Chair Senator Russell E. Ruderman, Vice Chair

FROM:

Matt Yamashita PO Box 1304 231 Kahinani Pl Kaunakakai, HI 96748

#### <u>RE:</u>

#### HB 1942, HD1

RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST WITH THE PLANNING, DESIGN, CONSTRUCTION, EQUIPPING, LAND LEASES, AND OTHER TANGIBLE ASSETS FOR A RENEWABLE ENERGY PROJECT WITH ENERGY STORAGE TECHNOLOGY ON THE ISLAND OF MOLOKAI.

Aloha to the members of the Hawaii Senate...

I am the 4<sup>th</sup> generation of my family to call Molokai home. My grandfather, Henry Yamashita, built and managed the Molokai Electric power plant for over 30-years. I am a father, husband, business owner, & active community member.

While the details of the Ikehu Molokai project has yet to be fully presented to and accepted by the Molokai community, I support the broad level goals of the project to convert the island's electrical system to nearly 100% renewable energy.

If the Ikehu project is designed and implemented with the best interests of the community as the top priority, Molokai has the unique opportunity to become a successful model of renewable energy for the world. The project will potentially provide much needed relief for island residents that are currently paying the highest energy rates in the nation. The project has the potential to address emergency preparedness concerns by eliminating the island's dependence on imported fuel for critical services such as electricity and water delivery (which is totally dependent on electricity-powered well pumps). The project will also help boost Molokai's economy by both providing jobs and by lowering the high overhead costs of running businesses on island. On a global scale, the project will help eliminate Molokai's carbon footprint while also representing a successful example of the necessary and technologically feasible move away from carbon-based fuel. Ultimately, the project would create an opportunity for Molokai to reach true sustainability.

The sponsors of the project, Princeton Energy Group, have begun a process of meeting with the Molokai community to develop the details of the project and to gain support. At this point, the project is still in its preliminary stages and the community eagerly awaits more details on the technical design and business structure of the project.

Secure financing will be critical to Ikehu's success if the community supports the project in its final form. Therefore, considering the limited window of opportunity for receiving an allocation of Special Purpose Revenue Bonds, I support House Bill 1942 HD1 with the stipulation that Princeton Energy Group continues to FULLY engage the Molokai community for input and ultimate approval of the Ikehu project... which they have so far showed a willingness to do.

So, while I reserve final judgment on the project until our community has seen all the details, I support the approval of the bonds as an important interim step.

Mahalo,

Matt Yamashita

## SENATE COMMITTEE ON ENERGY AND ENVIRONMENT Tuesday, March 11, 2014 at 2:45p.m.

#### **TESTIMONY IN SUPPORT OF HB 1942 HD1**

I support HB1942 HD1.

I am a long-term land owner in Molokai. My husband and I bought land in Molokai, after falling in love with the natural beauty of the island, and hoping to retire there. I am also Director of Project Finance for the Princeton Energy Group, which is developing the proposed renewable energy project with energy storage technology (Ikehu Molokai). Princeton Energy Group has been developing innovative and challenging renewable energy projects since the 1990s.

Because of my day to day work, I stayed very interested in the development of the "Big Wind" project on Molokai. When Molokai Ranch decided not to lease its land to this project in February 2013, I went to Molokai almost immediately thereafter, to hear from as many residents as possible, what could be done on the island which would utilize the abundant renewable energy resources on the island, for the island's benefit. I also met with Molokai Ranch, the Maui Electric Company (Meco) and inspected possible project sites. It emerged that there is strong support on the island for solar power to power Molokai, and provided we can put in significant energy storage, Meco will be supportive.

Upon hearing my report, I was delighted that my CEO (Steve Taber) felt that taking on this challenging project in Molokai is in line with Princeton Energy Group's corporate mission and expertise, and that he will be willing to put in a lot of effort himself, to make the project happen. Steve and his Co-founder have indeed taken on many challenging projects, such as the first renewable energy project in Crete (an island grid) in Greece, in Turkey and in Mexico.

Since my area of expertise and responsibility is project finance, after a 25 year career in structuring finance for numerous infrastructure and other projects, I am keenly aware that Ikehu Molokai needs access to favorable finance, in order to make the project happen. The load on Molokai is very small, yet the project needs a lot of expensive capital equipment, for both solar power generation and energy storage. It is thus critical that the State of Hawaii authorize issuance of special purpose revenue bonds (SPRBs) to help fund this project. SPRBs will bring in long-term funds at a reasonable cost to Ikehu Molokai.

It is important to receive the SPRB authorization in 2014, to ensure that Ikehu Molokai can be funded and completed and in operation in 2016. The 2016 deadline is driven by the scheduled expiration of the federal solar investment tax credit which amounts to 30% of the capital cost.

Therefore, I request that this measure be passed in the current legislative session. Thank you for the opportunity to testify.

Sincerely, Kumiko Yoshinari, PhD, CFA

### TESTIMONY/PETITION IN SUPPORT OF HB1942, HD1

# SENATE COMMITTEE ON ENERGY AND ENVIRONMENT March 11, 2014 at 2:45p.m. in Room 225

Honorable Committee Chair Gabbard, Vice Chair Ruderman, and Committee Members:

We are residents of Molokai and we fully support HB1942, HD1 because we care about the future of our island. This bill will enable the Ikehu Molokai project to issue special purpose revenue bonds through the State of Hawaii.

Ikehu Molokai aims to convert the island to 100% renewable energy and in that process to reduce and stabilize Molokai's extremely high electricity rates. We know that the Molokai electrical grid is very small, and thus it is hard to attract investors and financing to this project because it will not be very profitable. Therefore, the State of Hawaii should do everything in its power to facilitate the financing of this project. What happens in Molokai can be replicated elsewhere in Hawaii and beyond. It is well worth the effort of our legislators to pass this bill.

Respectfully,

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## TESTIMONY/PETITION IN SUPPORT OF HB1942, HD1

## SENATE COMMITTEE ON ENERGY AND ENVIRONMENT March 11, 2014 at 2:45p.m. in Room 225

Honorable Committee Chair Gabbard, Vice Chair Ruderman, and Committee Members:

We are residents of Molokai and we fully support HB1942, HD1 that is being heard by the Committee to enable the Ikehu Molokai project to issue special purpose revenue bonds through the State of Hawaii because we care about the future of our island.

Ikehu Molokai aims to convert the island to 100% renewable energy, and in the process, reduce and stabilize the extremely high electricity rates we are paying here. We know, however, that our electrical grid is very small, and thus it is hard to attract investors and financing to this project because it will not be very profitable. Therefore, the State of Hawaii should do everything in its power to facilitate the financing of this project. What happens in Molokai can be replicated elsewhere in Hawaii and beyond. It is well worth the effort of our legislators to pass this bill out.

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Name: Chipalith (H. Famakan
Address: P.O. Box 640 Kaunakakai, HI 96748
Name: Louis L. Class
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_ Name: famil K. fam. 8k.
Address: P.O. Box 1204
Kaunakalani, HI 96748

Name: Michael Kanalana

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Name: Milliam David

Address: R. Dan Long

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Name: Wennest Repes Gr.

Address: Pa Box 1996 Kaunatatai Hi 96748

Senator Mike Gabbard, Chai Senator Russell E. Ruderman, Vice Chair

DATE: Tuesday, March 11, 2014

TIME: 2:45 p.m.

PLACE: Conference Room 225

HB 1942

#### Aloha Chair:

I am a Molokai resident and believe that Molokai needs to move forward with sensible environmentally sensitive renewable energy without driving up rates. The Molokai community is engaged in trying to work with the utility and the within the community working to solve our energy challenges.

We fully support sensible efforts.

This bill authorizes Special Purpose Revenue Bonds (SPRBs) for storage project. The Molokai community has seen absolutely nothing in formal plans and the spoken plans have already changed. There is no viable project by Princeton.

However, section 2 of the bill states for the purpose of assisting Princeton Energy OR a special purpose entity established for the purposes of constructing an energy project with energy storage technology on Molokai.

I fully support the use of the word OR. I do not support a sketchy plan with virtually no details except "trust us". This looks like a scam more every day and using Molokai to get money and run just like the super ferry fiasco.

Respectfully submitted Cheryl Corbiell PO Box 1582, Kaunakakai HI 96748 Senate Committee on Energy and Environment:

Please help Molokai with objectives of Ikehu Molokai Project.

House Bill 1942 HD1, Special Purpose Revenue Bonds will be a big help to bring down the cost and improve reliability of MECO.

We have had blackouts on 2 of the last four Friday nights..both times we had to have security close our restaurant on the busiest time of week and cost us thousands of dollars in revenue... and our staff a needed payday..we have 41 employees at Paddlers Inn..the service from MECO is now jeopardizing the survival of our business.

Steve Taber of the Princeton Group has been very supportive of our effort to find a way to survive the energy service of MECO on Molokai.

Respectfully

Jerry Johnson

commercial property and business owner..... of Paddlers Inn " Kaunakakai

553 5558

March 10, 2014

My name is Paul Mullin and I am a resident of Molokai. I fully support **HB1942 HD1** under consideration, to enable the Ikehu Molokai project to issue special purpose revenue bonds through the State of Hawaii, because I care about the future of my island. Ikehu Molokai aims to convert the island to 100% renewable energy, and in that process reduce and stabilize the extremely high electricity rates we are paying here. I know however, that our electrical grid is very small, and thus it is hard to attract investors and financing to this project because it will not be very profitable. Therefore, the State of Hawaii should do everything in its power to facilitate the financing of this project, What happens in Molokai can be replicated elsewhere in Hawaii and beyond. It is well worth the effort of our legislators to pass the bill.

Name: Paul Mullin

Address: P.O. Box 348, Maunaloa, HI 96770

To members of the Hawaii Senate

We are residents of Molokai and support the goals of the Ikehu Molokai project. Ikehu Molokai will convert the island's electrical system to renewable energy, while bringing much-needed rate relief to the island. The sponsors of the project, Princeton Energy Group, have met with us and with numerous other community groups, receiving our input and shaping the project in response to our concerns.

We understand that the Senate is considering authorizing an allocation of Special Purpose Revenue Bonds to assist the Ikehu Molokai project, through House Bill 1942 HD1. We understand that this will bring down the cost of capital for the project and make it more feasible, potentially offering more rate relief to Molokai residents and businesses. We strongly support this allocation and urge the legislature to approve it. Molokai badly needs the Ikehu Molokai project. While we reserve final judgment on the project until we have seen all the details, we support the approval of the bonds as an important interim step.

Thank you very much for representing us.

Signed,
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(name) P.O. BOX 1264 K Kai, Hi 96748 (address)
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Antonia Agaavili P.O. Box 96779 Kkan (name) (address)
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To members of the Hawaii Senate

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Thank you very much for representing us.

Signed,	
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Aloha Senate Committee on Energy and Environment,

We have owned and lived on Molokai for the last 13 years. Moving here was the best decision we made. As you know living at the end of the road literally and figuratively has it's challenges. The frequent power surges and lack of reliability of power is a constant not to mention the highest rates in the country.

It is all worth it to be able to live here but improved efficiency and lower cost would greatly enhance our lives and provide new good paying jobs to our sagging island economy. Please support HB1942, HD1. Mahalo for all that you do for us.

George P Barbour
PO Box 319
Maunaloa, HI
96770
8085522429
Georgepbarbour@gmail.com

Aloha Senator Gabbard, Senator Ruderman and distinguished committee members,

I am writing to urge you to table this bill, or at least to take Princeton Energy's name out of it entirely.

I am a business owner, college teacher, Molokai resident and member of I Aloha Molokai. I respect the hopes of Molokai residents like Matt Yamashita that this Ikehu project will turn out well. But I fear we are all in for an unpleasant surprise.

I have listened to Mr. Taber at length and questioned him in public. His initial solar/pumped hydro concept was promising, but as the months go by his concept gets sketchier and he gets both more demanding and more noncommittal. As of today there is in fact no Ikehu plan; no site, no drawings, no engineering and no budget – just vague promises and a bouquet of rosy scenarios.

At our last Molokai Clean Energy Initiative meeting Mr. Taber's pitch was, "I can do anything you want; just give me the money first" ---- not a lot different from those breathless phone calls that say, "You've just won ten million dollars; send us \$2500 right away so we can process your prize!" At the same meeting Mr. Taber admitted he doesn't actually have any experience with the types of renewable energy being proposed. On his website he is listed as an architect.

When asked why he didn't share information about his appeal to the legislature, Mr. Taber played the victim, and actually accused several born and raised Molokai residents of betraying the island that he "loves" more than they do.

So far, then, we have "trust me" and emotional manipulation. Surely this is not enough to merit \$50 million in state credit. Surely our state cannot afford to buy a pig in a poke.

I know that many Molokai residents appreciate your willingness to underwrite an appropriate energy project for Molokai. Unfortunately, this isn't it. I strongly urge you to table this bill until a real project is proposed, or, if you do pass it, to take Princeton's name out of it.

Thank you for your consideration.

Sincerely,

Dr. Laurence Tool

#### HB1942

Submitted on: 3/10/2014

Testimony for ENE on Mar 11, 2014 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Kanohowailuku	Individual	Comments Only	No

Comments: Aloha Honorable Chairman Gabbard, Vice chair Ruderman, and committee members, on behalf of I Aloha Molokai I am sad to say we cannot support this bill at this time, supporting this measure with no real plan in place is like going window shopping with a blindfold following a blind salesman, who says... "that one looks good" seems the Tax credits have put everyone into a frenzy again, which is not good for planning any community project, "African proverb" "if you want to go some where fast go by yourself, if you want to go far go together" Mahalo I Aloha Molokai President Kanohowailuku Helm