

SB 2754

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 of the planning, design, and construction of a renewable energy project with energy storage technology on the island of Molokai.

WRITTEN TESTIMONY

TESTIMONY BY KALBERT K. YOUNG
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
ON
SENATE BILL NO. 2754

February 11, 2014

Put
Princeton
last

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

Senate Bill No. 2754, authorizes the issuance of special purpose revenue bonds (SPRB) to assist Princeton Energy Group or a related special purpose entity with the financing of 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.

SB2754

Submitted on: 2/10/2014

Testimony for ENE on Feb 11, 2014 14:50PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Doug McLeod	Mayor's Office County of Maui	Comments Only	Yes

Comments: This project is too preliminary to justify Special Purpose Revenue Bonds. The original proposal for solar pv plus pumped hydro seems to have changed radically and the community has not had access to even basic engineering studies or estimates at this time. Once it becomes clear what is being proposed the Legislature and the community can determine whether to provide funding support via SPRBs.



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
Tuesday, February 11, 2014 – 2:50 p.m. – Room 225

Ulupono Initiative Strongly Supports of SB 2754, 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 SB 2754, 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.

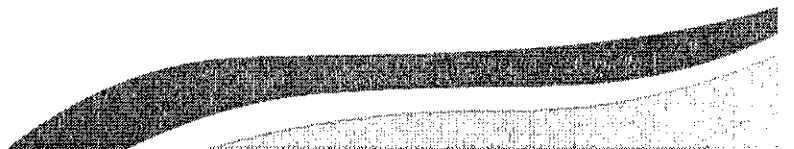
Ulupono is looking to invest in energy storage projects as we believe they could make a significant difference in helping Hawai'i reduce its dependence on fossil fuels.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay
Managing Partner

Email: communications@ulupono.com



Aloha Chairman Gabbard, Vice-Chair Ruderman and Honorable Committee Members,

I Aloha Molokai opposes this bill, SB2754. We oppose this bill based on our Resolution HCR189, which was passed unanimously by both houses last year. IAM has provided the venue (regular Molokai Clean Energy Initiative meetings) for Molokai Ranch and Princeton Energy to join the Molokai community and interested parties throughout the State to participate in bottom-up planning. While both Molokai Ranch and Princeton Energy have attended some of the meetings and have met with IAM and other community organizations, they somehow fail to grasp the entire concept of bottom up planning. IAM has repeatedly asked to be kept "in the loop" as the two entities develop the plan for their renewable project on Molokai, but the companies have fallen short. IAM offered our support in exchange for two things: widespread community involvement and the presentation of proper documentation on the Ikehu project. Unfortunately, Molokai Ranch and Princeton have not followed through. They have provided their idea, yet they still cannot or will not produce supportive documentation. To date we have seen no solid plans of any type, no engineering reports, no elevations, no financial projections – nothing – just conversations. While conversations are nice, substantive back-up is necessary to prove the viability of any plan.

We deeply appreciate the Legislature's willingness to support appropriate renewable energy projects for Molokai; we just don't know enough about Ikehū. We are unsure how this project would interface with MECO's aging Molokai grid. In our conversations with MECO it is still unclear what its stance is with regard to this project. Perhaps some of the answers will emerge at our next MCEI meeting on February 18, 2014.

Still another area of concern for I Aloha Molokai is how this project will be funded. When the concept first emerged, we were introduced to an investor who was going to provide the money for the entire project. Apparently this is no longer the case, as they have come to the Legislature for funding. To make matters worse, we now hear the solar/farm pumped hydro concept is off the table, and they are considering solar with battery back-up instead. We have also been informed that Maui County is withdrawing their support, presumably for some of the same reasons.

Please understand that I Aloha Molokai is not opposed to renewable energy projects. We would welcome and embrace projects that could help meet our island's energy needs. We just need partners that understand bottom up planning and can provide the necessary documentation to prove viability.

Thank you for your continuing support of Molokai and your consideration of projects that will help Molokai support renewable energy. We look forward to the time when we can submit testimony in full support of a project for the island. With more work, perhaps Ikehū will be that project – it is just not there yet.

Respectfully submitted,

Kanohowailuku Helm, President I Aloha Molokai

336-1061



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

MALAMA I KA HONUA
Cherish the Earth

SENATE COMMITTEE ON ENERGY & ENVIRONMENT

February 11, 2014, 2:50 P.M.
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 2754

Aloha Chair Gabbard and Members of the Committees:

The Sierra Club of Hawai'i, with over 12,000 dues paying members and supporters statewide, *supports* SB 2754. This measure authorizes a special revenue bond for the planning, design, and construction of a renewable energy storage device on the island of Molokai.

The proposal on Molokai — to create a 100% renewable energy system — is promising. While the specific proposal still needs to be vetted and approved by the community and pertinent regulatory bodies, we believe it worthwhile to leverage state support to ensure test projects like this move forward. What we learn on Molokai could have beneficial impacts on other islands.

Mahalo for the opportunity to testify.

EnerVault

ENERVAULT'S
TESTIMONY IN SUPPORT OF SB 2754

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

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

ENERVAULT supports SB2754 and respectfully requests that the Committee pass it out.

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

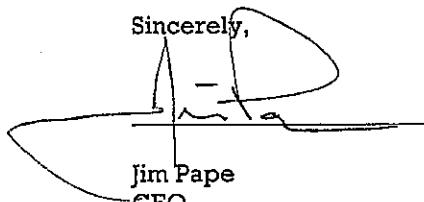
We are currently considering a role in the integration of a multi-hour, safe, reliable and cost effective energy storage system to support a high penetration of renewable resources in the Ikehū Molokai project, being developed by Princeton Energy Group. This is the project described in SB 2754 as the "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 Ikehū 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.

SB 2754 is vitally important to the success of the Ikehū 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 Ikehū 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 SB 2754 will provide.

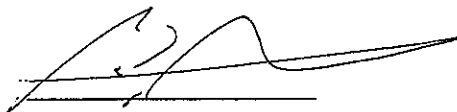
Therefore, we respectfully request that this measure be passed out.

Thank you for the opportunity to testify.

Sincerely,



Jim Pape
CEO
EnerVault



Bret Adams
Director of Business Development,
EnerVault

4 February 2014

Leonard K.P. Leong
Vice President

January 28, 2014

TO: Chair Gabbard, Vice Chair Ruderman, and members of the Committee:
SUBJECT: Senate Committee on Energy and Environment
RE: Testimony in Support of SB 2754



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

Royal Contracting Co., Ltd supports SB2754 and respectfully requests that the Committee pass it out.

The people of Molokai respect and care deeply for their island but living on the island is expensive.

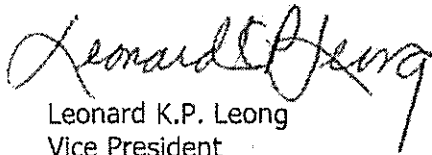
Electricity cost is extremely high and effort by Ikehu Molokai to develop a new source of energy at a lower rate is important.

Royal Contracting is working on Molokai and we feel that this will also be a boost to their economy since it will create jobs and lower electrical cost.

We support SB2754 since it will help to provide financing at a reasonable interest rate for this project.

Therefore, we respectfully request that this measure be passed out.
Thank you for the opportunity to testify.

Sincerely,


Leonard K.P. Leong
Vice President



MOLOKAI RANCH
Treasured heritage. Vibrant future.

**TESTIMONY IN SUPPORT OF SB 2754
SENATE COMMITTEE ON ENERGY & ENVIRONMENT**

Tuesday, February 11, 2014 at 2:50 pm 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 SB 2754. Molokai has one of the highest electricity rates in Hawaii, ranging from \$0.48 to \$0.52 per kwh. This bill will greatly assist Princeton Energy Group to implement “Ikehu Molokai”.

The primary goal of this project is rate relief for the residents and businesses of Molokai, stabilizing the electrical grid, reducing the carbon footprint and help the State meet the mandates for renewable energy.

Molokai Ranch owns and operates 3 utility companies highly dependent on electricity 24 hours/day. SB 2754 will result in rate relief, allowing Molokai Ranch to pass on cost savings to customers or possibly hire additional employees.

Therefore, we respectfully request that SB 2754 be passed out of committee.

Mahalo,

Clay R. Rumbaoa

SB2754

Submitted on: 2/6/2014

Testimony for ENE on Feb 11, 2014 14:50PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

SB2754

Submitted on: 2/6/2014

Testimony for ENE on Feb 11, 2014 14:50PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Walter Ritte	Individual	Oppose	No

Comments: My name is Walter Ritte from the Island of Molokai and I oppose this bill. We have no idea who this company is and how their project will impact our island. We have had some talks with the land owner Molokai Ranch, who by the way has treated this island badly in the past, with no follow through as of yet regarding our talks. Giving out public funds or support at this point for a project that has not yet been discussed properly on Molokai is a big mistake.

To: Senate Committee on Energy and Environment
Subject: Support for SB2754

Aloha Committee,

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 SB2754. Mahalo for all that you do for us.

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

TESTIMONY IN SUPPORT OF SB 2754

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 11, 2014 at 2:50p.m. in conference room 225

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

I support SB2754 and request that the Committee pass it.

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.

Therefore, I request that this measure be passed.

Thank you for the opportunity to testify.

Sincerely,

Kumiko Yoshinari, PhD, CFA

Date: January 30, 2014

My name is Paul Mullin and I am a resident of Molokai. I fully support **SB2754 and HB1942** 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 this bill.

Name: Paul Mullin

Address: PO Box 348

Maunaloa, HI 96770

From: Michael Mangana [mailto:michaelmangana@citlink.net]
Sent: Wednesday, January 29, 2014 8:50 PM
To: 'Rep. Lee and Senator Gabbard'
Subject: SB2754/HB1942 and SB2933/HB2618

Aloha Representative Lee and Senator Gabbard,

As you all may know, the Hawaii Legislative session began a few weeks ago. On the agenda this year are two bills that will impact the Ikehū Molokai project, and could lower the cost of electricity for Molokai residents. Those are [SB2754/HB1942](#) and [SB2933/HB2618](#). The first sets aside Special Purpose Revenue Bonds (SPRBs) for the Ikehū project, bringing down the cost to finance its initial construction. The second is a bill that creates tax incentives for all energy storage projects in the State of Hawaii – a great companion to the many tax incentives for building renewable energy projects that do not have a storage component.

Both of these bills, if passed, will reduce the cost of generating electricity on Molokai for the Ikehū project. As stated by MECo, reduced generation costs will be passed on to the consumer. I support these bills 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

Date:

My name is Hannani Kenikano and I am a resident of Molokai. I fully support **SB2754** and **HB1942** 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 this bill.

Name: Hannani Kenikano

Address: Box 163
Kaunakakai, HI 96748

Date: *Jan 28, 2014*

My name is *Elizabeth Kamakana* and I am a resident of Molokai. I fully support **SB2754** and **HB1942** 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 this bill.

Name: *Elizabeth H. Kamakana*

Address: *P.O. Box 640
Kaunakakai, HI 96748*

Date: 1-28-14

My name is Louise Laca and I am a resident of Molokai. I fully support **SB2754 and HB1942** 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 this bill.

Name: Louise L. Laca

Address: P.O. Box 1204
Kaunaloa, HI 96748

Date: 1/28/14

My name is Daniel K. Iaka Sr. and I am a resident of Molokai. I fully support **SB2754** and **HB1942** under consideration, to enable the Ikehū Molokai project to issue special purpose revenue bonds through the State of Hawaii, because I care about the future of my island. Ikehū 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 this bill.

Name: Daniel K. Iaka Sr.

Address: P.O. Box 1204
Kaunakakai, HI 96748

Date:

My name is MP Kamakana and I am a resident of Molokai. I fully support **SB2754** and **HB1942** 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 this bill.

Name: 

Address: Box 163

Kaunakakai, HI 96748

Date:

My name is Dennis Kama'ana and I am a resident of Molokai. I fully support **SB2754** and **HB1942** 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 this bill.

Name:

Dennis Kama'ana

Address:

POB 163
Kaunakakai, HI 96748

Date:

My name is Michael Kamakara and I am a resident of Molokai. I fully support **SB2754** and **HB1942** 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 this bill.

Name: Michael Kamakara

Address: Box 163
Kaunakakai

Date:

My name is Clement Reyes Jr. and I am a resident of Molokai. I fully support **SB2754** and **HB1942** 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 this bill.

Name: Clement Reyes Jr.

Address: P.O. Box 1996 Kaulakakai HI 96748

Date: 1-28-14

My name is Rex Kamaoka and I am a resident of Molokai. I fully support **SB2754** and **HB1942** under consideration, to enable the Ikehū Molokai project to issue special purpose revenue bonds through the State of Hawaii, because I care about the future of my island. Ikehū 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 this bill.

Name: 

Address: PO Box 640
Ikehu HI 96748

Date: 1-28-2014

My name is William Davis and I am a resident of Molokai. I fully support **SB2754 and HB1942** 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 this bill.

Name:

William Davis

Address:

P.O. Box 2092
Kaunoi, HI 96748

February 5, 2014

THE SENATE
THE TWENTY-SEVENTH LEGISLATURE
REGULAR SESSION OF 2014

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

DATE
Tuesday February 11, 2014

Re: **BILL SB2754**: 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

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

We are residents of Molokai and we fully support **SB2754** 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,

Nelson Calipano P.O. Box 313, Maunaloa, HI, 96770
Name Address
Colleen Calipano P.O. Box 313 Maunaloa, HI, 96770
Name Address

Daniel Pele P.O. Box 313 M'Loa, HI

Name Address

Raymond Hiro P.O. Box 253 M'Loa, HI 96770

Name Address

Adrian Sloan P.O. Box 313 m'loa, HI 96770

Name Address

VAHI SEUMIALO P.O. BOX 251 M'Loa 96770

Name Address

Kahalenani Kama-Pele P.O. Box 203 M'Loa 96770

Name Address

AMY Miravely P.O. Box 1280 K'kai 96748

Name Address

Amanda Tapera P.O. Box 226 Maunaloa HI 96720

Name Address

Donnie Rae Valdez P.O. Box 13 Maunaloa HI 96770

Name Address

Henry Lino Jr P.O. Box 1163 K'kai HI 96748

Name Address

PATRICK HIRO P.O. Box 238 M'LOA M'LOA HI 96770

Name Address

Mele Harohano P.O. Box 159 Kualapu'u Hawaii 96757

Name Address

Shumy Sasada P.O. Box 456 Hooehua 96729

Name Address

Napua Kekahuna P.O. Box 2026 K'kai, HI 96748

Name Address

Terimateata TERIRERE 640 Sheridan St #305 Honolulu HI 96812

Name Address

Valerie Duff Kennedy Box 199 H'Haui 96729

Name Address

Name Address

Anulua Kaai P.O. Box 482155, Kaunakakai HI 96748

Name Address

Zach Nisak P.O. Box Kaunakakai HI 96748

Name Address

Hiro Tenaha P.O. Box 199 H.H.K. 96729

Name Address

Rogael Duber P.O. Box 722 K'ker 96748

Name Address

Tere Neubart P.O. Box 128 Kpau 96757

Name Address

Michelle Hiro P.O. Box 250 M'hou 96770

Name Address

Aelani Hir P.O. Box 151 M'hou 96770

Name Address

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February 5, 2014

THE SENATE
THE TWENTY-SEVENTH LEGISLATURE
REGULAR SESSION OF 2014

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

DATE
Tuesday February 11, 2014

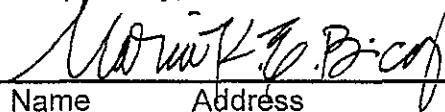
Re: **BILL SB2754**: RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST WITH THE PLANNING, DESIGN, CONSTRUCTION, EQUIPPING, LAND LEASES, AND OTHER TANGIBLE ASSETS FOR A RENEWABLE ENERGY PROJECT WITH ENERGY STORAGE TECHNOLOGY ON THE ISLAND OF MOLOKAI

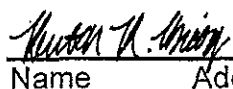
Honorable Committee Chair Gabbard, Vice Chair Ruderman and Committee Members:

We are residents of Molokai and we fully support **SB2754** 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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Edwin L. King P.O. Box 171 Hoolulu, HI 96729
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Director of Council Services
David M. Raatz, Jr., Esq.

COUNTY COUNCIL
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WAILUKU, MAUI, HAWAII 96793
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February 10, 2014

TO: Honorable Mike Gabbard, Chair
Senate Committee on Energy and Environment

FROM: Stacy Helm Crivello
Council Member

DATE: February 11, 2014

SUBJECT: **SB 2754 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**

Thank you for the opportunity to testify on this important measure. The purpose of this measure is 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.

The Princeton Energy Group has named its Molokai Project, Ikehū Molokai Project. The Princeton Energy Group initially identified their big plans for renewable energy on Molokai based on pumped hydro storage. Today, it is basing its plans on batteries or other considerations. I commend our legislators' efforts to provide support to address resolutions to reduce Molokai's crippling high cost of energy to the residents and businesses of Molokai. However, the Princeton Group has a myriad of unanswered technical issues. We are a small island grid. Because of the grid's technical challenges, what are the specifics that the rate payer will see in a reduction of electric cost from the group's energy project? There are positive merits to this legislation only if the right plans are in place and there is transparency through the process. I personally don't have assurance that the Ikehū Molokai Project driving motivation for the project is rate relief. The bill notes that such a project will stabilize the electrical grid on Molokai. There is no indication that Princeton Energy Group is collaborating with MECO to address its interconnectivity to the existing electrical infrastructure or identifying possible improvements to provide safe, reliable and stable connectivity or interconnectivity.

HNEI (Hawaii Natural Energy Institute), with receipt of grant monies from the Office of Naval Reserve, and in collaboration with the Department of Energy and the University of Hawaii, is developing a strong partnership with MECO to improve stability of the Molokai electric grid with its proposed battery storage project. HNEI is developing plans to create a working partnership with the Hawaii State Department of

February 10, 2014

Page 2

Hawaiian Home Lands to install battery systems to reduce DHHL's high cost of water delivery to Molokai homesteaders. HNEI is also working with the Hawaii State Department of Agriculture to plan on another project of battery storage to reduce the high cost of water delivery to Molokai farmers from the Molokai Irrigation System. The efforts of dialogue with HNEI, water purveyors, businesses as well as with community groups indicate an impressionable effort of community dialogue.

The Ikehū Molokai Project's developers have done only piecemeal approaches to the community. The proposed legislation extends tax credits and issuance of a \$50 million special purpose and refunding special revenue bonds. The measure also notes a timeframe of December 2014. The other qualifying federal tax credit has a cut off timeframe of 2016. Is the Princeton Energy Group using rural Molokai for their "bottom line?" What is its financial stake in this venture? How will Molokai's electric rates be reduced with their energy plans?

Please reconsider the measure's intent of assisting specifically the Princeton Energy Group but to open issuance to assist other industrial enterprises.

SSC:aas:SB2754-Comments

SB2754

Submitted on: 2/8/2014

Testimony for ENE on Feb 11, 2014 14:50PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
IRA CALKINS	Individual	Support	Yes

Comments: IRA CALKINS GOVERNMENTAL RESEARCHER 730 Captain Cook Ave Unit 426 Honolulu, Hawaii 96813-2161 Your actions will prove the following assertions to be the truth and factual. The Democratic Party Line has taken away the voice of the people in the making of laws. Taxation with out representation in the State of Hawaii. It appears the Hawaii State Legislators are being blackmailed in to voting the Democratic party line, or else the Democratic Party will not support the State of Hawaii Legislators in all state wide elections. It does not matter what the tax payers think, the Democratic Party line lays down the law on all bills before the State of Hawaii Legislature. The chairman's in all committee meetings has a predisposed script to follow that the Speaker of the House, and the Speaker of the Senate has given the Committee Chairs to follow, to instruct the committee members how to vote on a any given measures, all Bills in all committees of the State of Hawaii Legislature. It is determined ahead of time by the Democratic Party members how a committee member will vote when staying with in the party line on any given Bill in the State of Hawaii Legislature, Democracy has been taken away from the tax payers in the State of Hawaii. Ira Calkins Honolulu 4696434 or 3498667 FAX 808-545-4707 Washington D.C. 202-697-9782

PRINCETON ENERGY GROUP

Innovation in Renewable Energy

STEVE TABER
Chairman and CEO

PRINCETON ENERGY GROUP'S TESTIMONY IN SUPPORT OF SB 2754

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
Tuesday, February 11, 2013 at 2:50p.m.
Conference Room 225

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

Princeton Energy Group ("Princeton") supports SB2754 and respectfully requests that the Committee pass it out.

We are currently engaged in the Ikehu Molokai Project. This is the project described in SB 2754 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 have analyzed 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, 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.

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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 quieter storage technology, flow batteries, and a relocation of the equipment to the industrial park, remote from residential areas. The storage equipment, whether batteries or pumped storage, will keep the grid stable as more residents install rooftop PV panels, so the Ikehū project will support the build out of the maximum possible behind-the-meter, rooftop photovoltaic generation. Also, by stabilizing the grid, the storage resource will greatly reduce the frequent blackouts and brownouts that plague Molokai. Finally, it will enable MECo to shift the load-following function from the existing diesel generators to the storage equipment. This will extend the life of the diesel generators and eliminate part-load inefficiencies in fuel consumption. 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 Ikehū 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 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 February-March.

The economic impact of the SPRB allocation for the Ikehū 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.

SB2754 is vitally important to the success of the Ikehū 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 Ikehū 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 SB 2754 will provide. To further this process, we are in discussions with B&F and with DBEDT and preparing the exhibits required for their consideration of the SPRB, including our business plan and financial models.

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

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.

7 February 2014