

NEIL ABERCROMBIE GOVERNOR

SHAN S. TSUTSUI LT. GOVERNOR

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

KEALI`I S. LOPEZ DIRECTOR

JO ANN UCHIDA TAKEUCHI DEPUTY DIRECTOR

335 MERCHANT STREET, ROOM 310 P.O. Box 541 HONOLULU, HAWAII 96809 Phone Number: 586-2850 Fax Number: 586-2856 www.hawaii.gov/dcca

TO THE HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

THE TWENTY-SEVENTH LEGISLATURE REGULAR SESSION OF 2013

TUESDAY, FEBRUARY 12, 2013 8:30 A.M.

TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, TO THE HONORABLE CHRIS LEE, CHAIR, AND MEMBERS OF THE COMMITTEE

HOUSE BILL NO. 448 - RELATING TO LIQUEFIED NATURAL GAS

DESCRIPTION:

This measure proposes to establish certain reporting requirements that would apply to public utilities importing liquefied natural gas ("LNG") into Hawaii.

POSITION:

The Division of Consumer Advocacy (Consumer Advocate) supports the intent of this bill with the following comments and suggestions.

COMMENTS:

Initial studies done by the Hawaiian Electric Companies, Hawaii Natural Energy Institute (HNEI), and Hawaii Gas indicate that imported LNG as a fuel source for electricity generation offers consumers the potential for significant cost-savings compared to the continued use of petroleum. The Consumer Advocate therefore House Bill No. 448 House Committee on Energy and Environmental Protection Tuesday, February 12, 2013, 8:30 a.m. Page 2

supports further investigation into importing LNG to be used as a fuel source for electricity generation.

The Consumer Advocate notes that LNG has potential uses outside of the electricity industry. For example, it has the potential to be used in the motor and water transportation industries. If LNG is sold to the transportation industry, it may or may not be regulated. Moreover, depending upon the regulatory model adopted by this state, the sale of LNG to Hawaii's electric utilities may also be unregulated as is the sale of petroleum to the electric utilities. The Consumer Advocate suggests that the Legislature consider a reporting requirement for the sale of LNG in the State of Hawaii to and from any non-regulated entity to the Department of Business Economic Development & Tourism (DBEDT).

This bill further requires the Public Utilities Commission ("PUC") to open an investigative docket to examine the risks and benefits of LNG. The importation of LNG into the state has implications that far exceed the regulatory purview of the PUC. For example, if the electric utilities convert their oil-fired generators to burn natural gas, this would decrease their purchase of petroleum products. This has potential ramifications to Hawaii's oil industry that is not under the jurisdiction of the PUC. The Consumer Advocate suggests that any investigative docket opened by the PUC needs to be limited in scope to that which the PUC is statutorily able to regulate.

Finally, the requirement of an investigative docket should be done through a resolution rather than a statute. Completely apart from any regulatory scheme for LNG, it may become apparent that importing LNG into the state is not feasible. If this were to be the case, then an investigative docket would be unnecessary. Therefore, the Consumer Advocate suggests that this Legislature adopt a resolution that requires an investigative docket to be opened by the PUC concerning LNG that is limited in scope to matters that are within the jurisdiction of the PUC.

Thank you for this opportunity to testify.

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

FEBRUARY 12, 2013 8:30 a.m.

MEASURE:H.B. No. 448TITLE:Relating to Liquefied Natural Gas

Chair Lee and Members of the Committee:

DESCRIPTION:

H.B. No. 448 requires public utilities that import liquefied natural gas ("LNG"), as defined in the measure, to file annual reports with the Public Utilities Commission ("Commission") that list the amount, source, and extraction information of all imported LNG. The Commission is also required under this measure to conduct an investigative proceeding to examine "the risks and benefits" of LNG use in Hawaii, and to report regularly during the life of the investigative proceeding to the Legislature prior to the convening of each regular session.

POSITION:

The Commission would like to offer the following comments for the Committee's consideration.

COMMENTS:

The importation of LNG and its use in the electric sector has been the focus of several studies conducted by the Hawaii Natural Energy Institute ("HNEI"), Hawaii Gas and the Hawaiian Electric Company, Inc. Currently, the on-going discussions about LNG are very fluid; therefore, the Commission suggests holding an information briefing during the current legislative session and requesting a status report for the 2014 Legislature, rather than requiring the Commission to open an investigative docket.

H.B. No. 448 Page 2

A broad evaluation of LNG usage in the State has already been conducted through the HNEI study, and at this point an investigative docket may not be the best use of the Commission's limited resources. Act 99, Session Laws of Hawaii 2012, ("Act 99") already requires the Commission in the course of its deliberations to consider the costs and benefits of a diverse fossil fuel portfolio. Therefore, the Commission's review of LNG-related matters in accordance with Act 99 will seriously consider all statutory policies regarding its use.

With regard to the requirement that utilities file an annual report to the Commission sourcing the imported LNG, LNG is currently acquired through various market exchanges – similar to oil – where the exact sourcing of the LNG may not be accounted for, and where the focus is on price. This may be an unreasonable burden placed on a utility importing LNG to gather information beyond their control or knowledge.

Thank you for the opportunity to testify on this measure.

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 10, 2013 7:07 PM
To:	EEPtestimony
Cc:	dannygr@hawaiiantel.net
Subject:	*Submitted testimony for HB448 on Feb 12, 2013 08:30AM*

<u>HB448</u>

Submitted on: 2/10/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Daniel Grantham	Sierra Club Maui Group	Support	No

Comments:

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

Testimony on HB 448 – Support Michael J DeWeert, Energy Committee Chari, Environmental Caucus of the Democratic Party of Hawaini

Synopsis: The Environmental Caucus supports the complete phase –out of all fossil fuel imports to Hawai'i, and strongly recommends replacing all fossil fuels with locally-sourced green renewables. The use of liquefied natural gas (LNG) as a fossil fuel displacing oil and coal will entail investments in new infrastructure and capital equipment. These very substantial costs will ultimately be passed on to the utility ratepayers, and will also divert resources from sustainable-energy development. In addition, the use of hydro-fracking and other polluting gas-mining technologies greatly reduces the "green" benefits of LNG fuel. Thus, the risks and costs (economic, environmental, and social) must be fully understood and evaluated before any LNG-imports are undertaken. A fair and complete assessment would very likely result in the rejection of LNG imports. Thus, we support HB448, provided that the evaluation criteria fully weigh all environmental, social, cultural, and economic factors, and that the economic bias is in favor of the retail energy *consumers*.

Details: The main attraction of liquefied natural gas (LNG) is the currently low cost of the fuel. However, that cost is subject to market variability that no-one in Hawai¬i can control. As world demand changes, the cost of natural gas can rise substantially in short order. What we **can** control is whether we let the allure of currently-low LNG prices divert our resources from a long-term path towards sustainability and self-sufficiency.

Using LNG in Hawai i will entail substantial investments in new on-land and offshore facilities to off-load tankers, store the gas, and make use of it ashore. The average cost of a new regasification plant in the United States is \$200,000,000 --\$300,000,000,¹ and will likely be even costlier in Hawai'i. State-of-the-art Japanesemade facilities can cost upwards of **\$2 Billion**. In addition, construction of new marine facilities for LNG tankers can easily be \$100,000,000 or more.² For the onshore upgrades, retrofitting coal- and oil-fired boilers to run on natural gas will cost would cost tens of millions of dollars, ³ and pipeline installation costs to supply all fossilfuel-burning generators would be similarly costly – totaling \$100M or more⁴ for generator upgrades and pipeline installation. In sum, the capital costs to just begin importing LNG would be on the order of \$500,000,000 dollars, and could be \$2,000,000,000 or more. In addition, they will take years to install and test, during which

¹ Source: US Energy Information Administration,

http://www.eia.gov/oiaf/analysispaper/global/lngindustry.html² ibid.

³ Estimates are based on data in: James A. Fay, Dan S. Golomb, Savvakis C. Zachariades, FEASIBILITY AND COST OF CONVERTING OIL- AND COAL-FIRED UTILITY BOILERS TO INTERMITTENT USE OF NATURAL GAS Energy Laboratory Report No. MIT-EL 86-009 (December 1986).

⁴ We have converted 1985 dollars to 2013 dollars, with the US inflation calculator CoinNews Media Group LLC. http://www.usinflationcalculator.com/

-

time we will keep paying for imported oil and coal. The same funds invested in solar energy, local-wind, biofuels, and other sustainable sources would yield between 100MW and 400MW of installed capacity. Done properly, those investments would begin producing energy within weeks, steadily reducing our oil imports, and allowing us to decommission (instead of paying to upgrade) aging oil and coal-burning generation facilities. The savings could then be invested in even more renewable energy and grid innovations to further reduce our dependence on fossil fuel. Further, each dollar kept in the local economy returns \$1.45--\$2.50 in local economic benefits.⁵

Additional costs will accrue from the need to mitigate the new risks that LNG-tanker accidents pose near major population centers. Unlike petroleum spills, LNG evaporates quickly, creating an asphyxiation hazard, in addition to the fire hazard. The radius of the hazards can be substantial -- 2.5 miles or more in LNG-industry simulations.⁶ The costs of equipping and training first responders to deal with these new risks will be borne primarily by the public sector- the taxpayers.

Overall, our economic analysis shows that, for Hawai'i utility customers and their communities, the clear choice is to invest in renewable energy first, and use new fossil fuel sources such as LNG, only as a very *last* resort.

In addition to the economic considerations, we have substantial environmental and cultural concerns. There is considerable evidence that the new technologies, such as hydraulic fracking, that have led to recent reductions in US-based natural gas costs, also cause substantial damage to local environments and water supplies. Even if these environmental costs don't directly impact Hawai \Box i, Hawai \Box i citizens are part of the US taxpayer population that will have to pay for the eventual clean-up. Even more important, polluting other people's homes is not consistent with our culture of Aloha, concept of pono, and practice of malama \Box aina.

Altogether, we are confident that a real assessment of all of the long-term costs, benefits, and risks will lead to a strong recommendation to develop Hawai i-provided green energy sources instead of using LNG or any other imported fossil fuels.

 ⁵ For example, see the Shop Locally website: <u>http://www.localmultiplier.com/</u>.
 ⁶ Doug Quillen, "LNG SAFETY MYTHS and LEGENDS," ChevronTexaco Corp, Houston, TX (2002).



Tuesday, February 12, 2013 8:30 A.M. State Capitol, Conference Room 325 HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION AND HOUSE COMMITTEE ON AGRICULTURE

Testimony in opposition of HB 448

Chair Lee, Chair Wooley, Members of the House Committees on Energy & Environmental Protection and Agriculture, my name is Joe Boivin and I am the Senior Vice President for Public Affairs and Communications at HAWAI'IGAS testifying in opposition of HB 448. HAWAI'IGAS is the only franchised gas utility in the state of Hawai'i, providing gas service to over 70,000 utility and tank and bottled gas customers throughout the state. With the pending shut down of the Tesoro Refinery, HAWAI'IGAS is moving forward with a plan to bring liquefied natural gas ("LNG") from the Continental United States to Hawai'i within the next several months. LNG will first be used as backup for our existing customers in the event of a supply disruption. We plan to eventually expand the use of LNG to further reduce our reliance on naphtha and serve the needs of specialized customers on O'ahu and the neighbor islands.

HAWAI'IGAS opposes HB 448 because it will place an unfair burden on the use of natural gas compared to all other forms of energy. All forms of energy, including renewables, have an impact on the environment. For instance, solar manufacturing companies in California produced 46.5 million pounds of sludge and contaminated water from 2007 to 2011.¹ Solyndra, the now-defunct solar company that received \$535 million in guaranteed federal loans, reported producing about 12.5 million pounds of hazardous waste, much of it carcinogenic cadmium-

¹ http://news.yahoo.com/solar-industry-grapples-hazardous-wastes-184714679.html

contaminated water, which was sent to waste facilities from 2007 through mid-2011.² Solar companies are not required to report on the impact of the manufacturing of solar panels on the environment. Requiring utilities that import natural gas to report on the hydraulic fracturing technique, chemicals used and the green house emitted during extraction is unfair if other forms of energy do not have to meet similar requirements.

Furthermore, identifying the source of LNG is unreasonable. In the United States there are 305,000 miles of transmission pipelines with 11,000 delivery points, 5,000 receipt points, and 1,400 interconnection points that provide for the transfer of natural gas throughout the United States.³ Tracking gas from its point of origin to the point of consumption is nearly impossible based on the number of fields the gas comes from and the various pipelines that can deliver it to a liquefaction facility. Therefore, requiring HAWAI'IGAS to track the source of its LNG is unreasonable and unfair. Thank you.

 ² <u>Id</u>.
 ³ See U.S. Energy Information Administration - About Natural Gas Pipelines http://www.eia.gov/pub/oil_gas/natural_gas/analysis_publications/ngpipeline/index.html



76 North King Street, Suite 203 Honolulu, Hawai`i 96817 Phone: 533-3454; E: <u>henry.lifeoftheland@gmail.com</u>

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Rep. Chris Lee, Chair Rep. Cynthia Thielen, Vice Chair

DATE: Tuesday, February 12, 2013 TIME: 8:30 AM

PLACE: Conference Room 325

HB 448 RELATING TO LIQUEFIED NATURAL GAS

SUPPORT

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

Life of the Land is Hawai`i's own community action group advocating for the people and the land since 1970. Our mission is to preserve and protect the life of the land by promoting sustainable land us promote open government through research, education, advocacy, and when necessary, litigation.

The HECO Companies must decide between several Big Ticket (Multi \$100M-\$2B) Items:

(1) Overhauling emission controls on existing fossil fuel generators to meet new EPA Air Permit Rules

(2) Overhauling fossil fuel generators so they can burn biodiesel and/or LNG

(3) Replacing existing fossil fuel generators with new more efficient LNGpowered Gas Turbines

(4) Building Inter-Island High Voltage Direct Current (HVDC) Cable(s)

(5) Building a Smart Grid

The purpose of this bill is (1) the PUC to open an investigative docket to begin looking at the costs/benefits of LNG and (2) to understand the externalities associated with LNG fuel.

The Federal Energy Regulatory Commission opened a docket to examine the Hawai`iGas proposal. The PUC, Life of the Land, Sierra Club and Blue Planet intervened in the docket. FERC said it wasn't there jurisdiction. LNG is the kuleana of the PUC.

This bill would put legislative support behind the next obvious step.

Mahalo

Henry Curtis Executive Director





HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION February 12, 2013, 8:30 A.M. Room 325 (Testimony is 4 pages long)

TESTIMONY IN SUPPORT OF HB 448

Chair Lee, Vice-Chair Thielen, and members of the Committee:

The Blue Planet Foundation **supports** HB 448 and the intent to direct the Public Utilities Commission ("PUC") to carefully investigate importation of industrial liquefied methane ("LNG") into Hawai'i. However, portions of the bill are inaccurate and should be amended. Moreover, we request several simple amendments to ensure that the PUC's investigation properly captures and protects against the known risks of importing LNG.

The bill begins with the uncertain statement that "[r]eplacing petroleum and coal with liquefied natural gas may reduce the cost of electricity, the environmental footprint of electricity production, and greenhouse gas emissions. Liquefied natural gas may also enable higher penetration levels of renewable energy."

These statements are too uncertain, and indeed, contrary to current scientific evidence. They should be stricken from the bill, for the following reasons:

SCIENCE REVEALS THAT LNG IS NOT A "CLEAN ENERGY RESOURCE" AND CAN BE EVEN DIRTIER THAN COAL AND OIL

The myth that LNG is "clean energy" and is certain to reduce the environmental footprint of electricity production in Hawai'i has been scientifically debunked. LNG is comprised primarily of methane (CH₄). Methane is a potent greenhouse gas – more potent than CO₂. According to the U.S. EPA, "methane emissions released to the atmosphere (without burning) are about 21 times more powerful than CO₂ in terms of their warming effect on the atmosphere."¹ This is critical, because LNG production is known to release large quantities of methane into the atmosphere, long before the LNG reaches a power plant to be burned. For example, on January 3, 2013 the

¹ See http://www.epa.gov/cleanenergy/energy-resources/refs.html

highly respected scientific journal Nature reported on findings presented by NOAA scientists who measured methane leakage rates from LNG wells. The title of that report is "*Methane leaks erode green credentials of natural gas.*"² Among other things, the report notes that the NOAA scientists measured methane leakage from LNG wells in Utah equating to 9% of well production. This is approximately *three times higher* than "the 3.2% threshold beyond which gas becomes *worse for the climate than coal.*"³ Studies of other well fields and natural gas systems have similarly reported methane leakage exceeding the 3.2% threshold.⁴

LNG IS A SIGNIFICANT GAMBLE, WITH RATEPAYERS' MONEY

The potential for LNG to reduce the price of electricity in Hawaii is extremely uncertain. This is most apparent from the recent study commissioned by the Hawaii Natural Energy Institute ("HNEI"). HNEI hired the Gas Company's own consultant to conduct HNEI's study. This conflict of interest heightens the need for HB 448 and an unbiased review of the risks of importing LNG.

In that study, the HNEI/Gas Co. consultant noted that an LNG price benefit of 15-20% would not make economic sense for Hawai'i. Instead, the report found that LNG would provide an economic benefit for Hawai'i only if sourced from the U.S. mainland, with an estimated 30-50% fuel price benefit. The need to meet this extraordinarily high fuel price reduction is likely in part due to the enormous infrastructure costs associated with importing LNG, building a regasification facility in the coastal zone, acquiring transport infrastructure, and building combustion turbine generators.

Notably, the consultant established the possibility of a 30-50% price benefit by assuming that "[i]n real terms, our crude oil prices and diesel prices climb slowly but steadily through 2030." In other words, part of the gamble on LNG is that oil prices will rise, but LNG prices will not (or will rise more slowly). Approximately two weeks later, the director of the HNEI/Gas Co. consultant was interviewed by the Star-Advertiser, and stated that "our long-term price forecast is for oil to be \$30 less than it is today. ... this probably will start from 2015 or '16, and going to about the \$80 range and stay there for a number of years. Actually, it can go even lower."

² See Tollefson, *Methane Leaks Erode Green Credentials of Natural Gas*, NATURE (January 3, 2013) (reporting "alarmingly high" leaks of 9% of well production).

³ See Alvarez et al., *Greater focus needed on methane leakage from natural gas infrastructure,* PROC. NAT'L ACAD. SCI. (April 24, 2012).

⁴ See, e.g., Pétron et al., *Hydrocarbon emissions characterization in the Colorado Front Range: A pilot study*, J. GEOPHYS. RES. 117; (2012); Howarth et al., Methane Emissions from Natural Gas Systems, Background Paper Prepared for the National Climate Assessment, Ref. no. 2011-0003, *available at* http://www.eeb.cornell.edu/howarth/Howarth%20et%20al.%20--%20National%20Climate%20Assessment.pdf

These alarmingly contradictory statements underscore the need for careful investigation into LNG, and highlight that importing LNG based on potential energy cost savings is a gamble for ratepayers. Note, for example, that large quantities of LNG can reach Hawai'i's shores only if an LNG export facility is built on the U.S. mainland (currently, there are no approved export facilities). But, if LNG can reach Hawai'i, then it can also reach the Asian market, where LNG prices are much higher than the U.S. mainland. This begs the question – why would anyone sell LNG to Hawaii for a lower price that can be obtained in Asia and other export markets?

The magnitude of this gamble for ratepayers cannot be understated. If the price of oil falls as predicted by the HNEI/Gas Co. consultant, or if the price of exported LNG rises to match the price in export markets, then we will not achieve the 30-50% fuel price benefit necessary for LNG to make economic sense for Hawai'i. But by that time, it will be too late. Just as we are currently tied to a generating unit installed in 1947, we will be tied to the enormous LNG infrastructure for 60 years or more. Ratepayers will suffer, but importing LNG will still be a lucrative business. Essentially, importing LNG based on potential pricing is like gambling with house money. The PUC should be directed to investigate ways to shift this risk away from ratepayers.

BY ITSELF, LNG CANNOT ENABLE HIGHER PENETRATION LEVELS OF RENEWABLE ENERGY.

There is nothing magical about LNG. It is simply another fossil fuel. The meme that it can increase penetration levels of renewable energy is based on the unstated assumption that Hawai'i's generating units will be replaced with combustion turbines. Those turbines will be expensive, and we are left with a dangerous promise that they would be operated to optimally accommodate renewable power. Moreover, we have long ignored other methods of using renewable power most effectively, with strategies like "time of use" and "time of supply" rates, or widespread demand response. If we are looking for ways to increase our use of renewable energy resources, importing a new fossil fuel should be our *last* option, not our first.

REQUESTED AMENDMENTS

For the above-noted reasons, we request the following amendments:

Section 1:

Delete the first sentence:

Hawaii may benefit from the use of liquefied natural gas. Replacing petroleum and coal with liquefied natural gas may reduce the cost of electricity, the environmental footprint of electricity production, and greenhouse gas emissions. Liquefied natural gas may also enable higher penetration levels of renewable energy.

Section 2: Amend sub-section (3) of H.R.S. § 269-8(b):

> (b) Public utilities importing liquefied natural gas into Hawaii shall tile annual liquefied natural gas reports with the public utilities commission. The reports shall include:
> ...
> (3) With respect to the process of extracting producing and transporting the imported liquefied natural gas, the hydraulic fracturing techniques and chemicals used and greenhouse gases emitted during the entire importation lifecycle, including, but not limited to, production, transportation, liquefaction, regasification, storage, and all other steps required for importation.

Section 4:

Amend as follows:

The public utilities commission shall initiate an investigative docket to examine the risks and benefits of the use of imported liquefied natural gas in this State, including the impact on the environment, <u>lifecyle</u> <u>emissions, and health risks, and also including an</u> <u>examination of methods for shifting pricing risks from the</u> <u>ratepayer to the importer</u>. For this docket, the public utilities commission shall submit a progress report and, upon issuance of the final decision and order in the docket, a final report, to the legislature no later than twenty days prior to the convening of the regular session of each year, as applicable.

With these amendments, Blue Planet supports HB 448. Thank you for the opportunity to testify.



Sierra Club Hawai'i Chapter PO Box 2577, Honolulu, HI 96803 808.538.6616 hawaii.chapter@sierraclub.org

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

February 12, 2013, 8:30 A.M. (Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF HB 448 WITH PROPOSED AMENDMENT

Aloha Chair Lee and members of the Committee:

The Sierra Club, Hawaii Chapter, with over 10,000 dues paying members and supporters statewide, respectfully *supports* HB 448. The bill is requires both annual reporting of liquified natural gas use and the PUC to open a docket into the risks and benefits of LNG.

LNG in Hawai'i would likely increase fracking and carbon emissions, put sensitive ecological areas at risk, and do nothing to address our energy problems. Fracking fouls the environment where people live with methane and unknown chemicals – further polluting the air people breathe, the water people drink. The supercooling process that turns fossil fuel vapor into LNG requires an immense amount of energy – so much energy, in fact, that some reports suggest the LNG lifecycle is as dirty as coal itself.

And what will this do to solve Hawai'i's energy problems? Nothing. LNG is a volatile commodity, and most experts predict it will increase in price, much like oil has increased over time. We would go from one liquid fossil fuel addiction to another.

Before we invest precious capitol investment dollars in building infrastructure to handle LNG, the PUC should do a serious analysis not only of the risks and benefits of LNG, but alternative scenarios that minimize or eliminate the need for fossil fuels. To this end, we propose the following amendment:

SECTION 4. The public utilities commission shall initiate an investigative docket to examine the risks and benefits of the use of imported liquefied natural gas in this State, including the impact on the environment and health risks. <u>The public utilities commission shall also look at ways to minimize or eliminate the use of fossil fuels entirely.</u> For this docket, the public utilities commission shall submit a progress report and, upon issuance of the final decision and order in the docket, a final report, to the legislature no later than twenty days prior to the convening of the regular session of each year, as applicable.

Mahalo for the opportunity to testify.



From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 10, 2013 4:51 PM
To:	EEPtestimony
Cc:	redahi@hawaii.rr.com
Subject:	Submitted testimony for HB448 on Feb 12, 2013 08:30AM

<u>HB448</u>

Submitted on: 2/10/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
B.A. McClintock	Individual	Support	No

Comments: Please support.

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

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 11, 2013 8:40 AM
To:	EEPtestimony
Cc:	brilana@gmail.com
Subject:	*Submitted testimony for HB448 on Feb 12, 2013 08:30AM*

<u>HB448</u>

Submitted on: 2/11/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Brilana Silva	Individual	Support	No

Comments:

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

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 10, 2013 8:05 AM
To:	EEPtestimony
Cc:	clk5356@gmail.com
Subject:	*Submitted testimony for HB448 on Feb 12, 2013 08:30AM*

<u>HB448</u>

Submitted on: 2/10/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Carolyn L Knoll	Individual	Support	No

Comments:

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

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 10, 2013 8:30 AM
То:	EEPtestimony
Cc:	mh@interpac.net
Subject:	Submitted testimony for HB448 on Feb 12, 2013 08:30AM

<u>HB448</u>

Submitted on: 2/10/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

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

Comments: HB 448 would shine a light on LNG. It would require annual LNG reports to be filed with the PUC (including how the gas was extracted and the greenhouse gases emitted) and require the PUC to look at the risks and benefits of LNG.

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

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 10, 2013 3:54 PM
То:	EEPtestimony
Cc:	IkaikaPestana@gmail.com
Subject:	Submitted testimony for HB448 on Feb 12, 2013 08:30AM

<u>HB448</u>

Submitted on: 2/10/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Ikaika Pestana	Individual	Support	No

Comments: I very much support this bill and the need for the PUC to annually monitor the positive and negative effects of LNG.

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

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 10, 2013 10:23 PM
To:	EEPtestimony
Cc:	mendezj@hawaii.edu
Subject:	*Submitted testimony for HB448 on Feb 12, 2013 08:30AM*

<u>HB448</u>

Submitted on: 2/10/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

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

Comments:

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

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 10, 2013 10:49 PM
To:	EEPtestimony
Cc:	merway@hawaii.rr.com
Subject:	Submitted testimony for HB448 on Feb 12, 2013 08:30AM

<u>HB448</u>

Submitted on: 2/10/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Marjorie Erway	Individual	Support	No

Comments: The PUC needs to understand just how the LNG was extracted and what greenhouse gases were emitted. The PUC absolutely needs to understand the risks and benefits of LNG. Please support this bill.

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

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 11, 2013 10:11 AM
То:	EEPtestimony
Cc:	maguinger@hawaii.rr.com
Subject:	Submitted testimony for HB448 on Feb 12, 2013 08:30AM

<u>HB448</u>

Submitted on: 2/11/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Mary A. Guinger	Individual	Support	Yes

Comments: This Natural Gas study is important to know the dangers and benefits and compare cost & advantages of local sustainable energies including local economy and labor. This study is important for planning for the future.

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

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 10, 2013 8:14 PM
То:	EEPtestimony
Cc:	Leealdridge@msn.com
Subject:	Submitted testimony for HB448 on Feb 12, 2013 08:30AM

<u>HB448</u>

Submitted on: 2/10/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Rosemary Aldridge	Individual	Oppose	No

Comments: If this bill passes, we will have even higher energy costs.

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

From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, February 09, 2013 9:59 AM
To:	EEPtestimony
Cc:	tabraham08@gmail.com
Subject:	*Submitted testimony for HB448 on Feb 12, 2013 08:30AM*

<u>HB448</u>

Submitted on: 2/9/2013 Testimony for EEP on Feb 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Troy Abraham	Individual	Support	No

Comments:

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