



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY
CONTROL

235 S BERETANIA ST. SUITE 702
HONOLULU, HAWAII 96813
Tel. (808) 586-4185
Fax. (808) 586-4186
Email: oeqc@doh.hawaii.gov

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
COMMITTEE ON WATER, LAND, & OCEAN RESOURCES

HB 2689 RELATING TO GEOTHERMAL ENERGY

Testimony of Gary Hooser
Director of the Office of Environmental Quality Control

February 2, 2012

1 **Office's Position:** OPPOSED

2 **Fiscal Implications:** NONE

3 **Purpose and Justification:** HB 2689 proposes exempting slim hole wells from environmental
4 review now required under Chapter 343, HRS.

5 The Office of Environmental Quality Control opposes HB 2689 as it circumvents the
6 fundamental intent of Chapter 343 which is to base decisions on probable or expected impacts of
7 specific actions in specific set of circumstances rather than broad classes of "one size fits all"
8 actions that govern all situations regardless of circumstances.

9 For example it may be perfectly logical to exempt from environmental review a slim hole
10 well planned for an area that has already been urbanized or perhaps "plowed under", or
11 otherwise obviously would have no significant environmental impacts. However conducting the
12 same activity in an area where endangered species, burials or perhaps other factors present –
13 might warrant a closer look and an environmental assessment to determine impacts.

1 While a “slim hole well” as defined seems relatively unobtrusive, the location in which
2 they are installed is a factor, ingress and egress to those locations may be a consideration, and the
3 number of slim hole wells drilled are factors, just to name a few considerations.

4 These “other factors” are such an important consideration that all exemptions and the
5 current approved exemption process under Chapter 343 and Section 11-200-8, Hawaii
6 Administrative Rules, have a caveat that states “All exemptions under the classes in this section
7 are inapplicable when the cumulative impact of planned successive actions in the same place,
8 over time, is significant, or when an action that is normally insignificant in its impact on the
9 environment may be significant in a particularly sensitive environment.”

10 The OEQC encourages the Committee to amend the measure to include a similar
11 requirement should this Bill continue to move forward.

12 Finally, the OEQC is concerned that this measure requesting a statutory exemption
13 circumvents the established process that requires by law the Environmental Council to review
14 and approve exemption requests such as this. The Department of Land and Natural Resources
15 has recently requested that this item be placed on the agenda of the Environmental Councils
16 Exemption Committee which is being done. The Environmental Council is fully engaged in
17 fulfilling its duties, there is no back-log on exemption requests at the present time, this is a public
18 and fully sun-shined process, and we ask that this process be honored and allowed to run its
19 course.

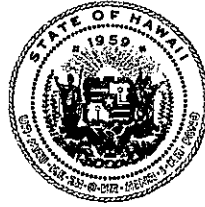
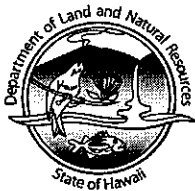
20 In conclusion, it is important to point out also that under existing law, the Department of
21 Land and Natural Resources and or the Land Use Commission may exempt from Chapter 343
22 any action or activity if they believe there will be no or negligible environmental impacts. The
23 important distinction is that the exemption option that presently exists under law requires

1 someone to actually look at the project closely, make a decision and be accountable. When
2 utilizing statutory exemptions such as are being proposed, it allows decisions to be made without
3 accountability – No one actually has to look at the project closely, no one has to make a decision
4 and no one has to take responsibility.

5 For these reasons the OEQC is opposed to HB 2689.

6 Thank you.

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY H. KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING

FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAIHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Testimony of
WILLIAM J. AILA, JR.
Chairperson

Before the House Committees on
ENERGY & ENVIRONMENTAL PROTECTION
and
WATER, LAND & OCEAN RESOURCES

Thursday, February 2, 2012
9:00 A.M.
State Capitol, Conference Room 325

In consideration of
HOUSE BILL 2689
RELATING TO GEOTHERMAL ENERGY

House Bill 2689 defines "slim hole wells" and "large hole wells", exempts slim hole wells from Hawaii Revised Statutes Chapter 343 requirements, and establishes specific environmental safety requirements for slim hole wells. The Department of Land and Natural Resources (Department) supports the intent of this measure as it could facilitate the testing and analysis to determine the viability of a geothermal resource, however, we prefer the language in House Bill 2690 that defines "geothermal resources exploration" and exempts these actions from the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS).

House Bill 2689 specifies specific well diameters to differentiate between slim hole and large hole wells which may be too restrictive due to the depth of a well required to access the geothermal resource which could penetrate approximately 6,000 to 8,000 feet below the surface. Geothermal wells are telescopic in nature, reducing to smaller diameters as the drilling progresses.

The Department believes that no anticipated significant impacts will result from exploration activities and sufficient safeguards and mitigation requirements exist within current rules, regulations and permitting conditions to ensure protection of the environment, public health and safety, and the resource. An EA or EIS will be required once a viable resource is found and production is sought.

Thank you for the opportunity to comment.

Testimony before
The House Committees
on
Energy and Environmental Protection
and
Water, Land & Ocean Resources
H.B. 2689-- Relating to Geothermal Energy

Thursday, February 2, 2012
9:00 am, Conference Room 325

By Arthur Seki
Director, Renewable Technology
Hawaiian Electric Company, Inc.

Chairs Coffman and Chang, Vice-Chairs Kawakami and Har, and Members of the Committees:

My name is Arthur Seki. I am the Director of Renewable Technology for Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric Company (HECO) and its subsidiary utilities, Maui Electric Company (MECO) and Hawaii Electric Light Company (HELCO). We support H.B. 2689 which seeks permitting flexibility to promote geothermal development during exploratory well investigations.

Geothermal energy development is different from other renewable energy resource development. Geothermal energy development can be distinguished and categorized by two major phases—exploratory (resource) development phase and a commercial development phase. The exploratory development phase is considered a high risk phase where go/no-go decisions are made at key activities. Once the geothermal resource is found and proven, then a lower risk production well development and commercial power plant development can take place.

The exploratory phase consists of geological, geophysical, and geochemical studies and evaluations and exploratory (slim hole, non-production well) drilling. The exploratory

well drilling is a key step in providing ground truth on the geothermal resource (temperature, pressure, water chemistry, geology, etc.).

To keep the delicate balance of proper environmental protection and oversight, we strongly support that safeguards should be conditioned to exploratory well drill permits and other approvals on protecting freshwater aquifer, waste water handling, noise, etc.

As you may know, HELCO released a geothermal request for information (RFI) in mid-2011 with an emphasis on West Hawaii development (currently there is no geothermal resource subzone there) and received 20 responses from developers and landowners. As a result of this RFI, HELCO recently announced plans to issue a geothermal request for proposal (RFP) in 2012. Steps are currently being taken to open a geothermal RFP docket at the Public Utilities Commission.

In addition, university researchers have recently received federal government grants to obtain new geothermal data that can help in establishing a West Hawaii geothermal resource subzone. Thus, the amendments being considered in H.B. 2689 will help the geothermal development process during the exploratory phase.

We are excited about the steps to be taken in the geothermal RFP processes as it can lead to increased geothermal development and reduced dependency fossil fuels.

Thank you for the opportunity to testify.

February 2, 2012

House Committee on Environmental Protection

House Committee on Water, Land & Ocean Resources

Hawaii State Legislature

235 South Beretania Street

Honolulu, HI 96813

RE: Written Testimony in opposition to HB 2689 Relating to Geothermal Energy

Aloha Chairs Coffman and Chang and Members of the Committees:

I am Mary Steiner writing on behalf of the Environmental Council in opposition to the above referenced bill.

The purpose of House Bill 2689 is to exempt slim hole wells from chapter 343, HRS, and to establish specific environmental safety requirements for slim hole wells.

Chapter 343, HRS, already includes a process whereby agencies can submit proposed exemption lists to the Environmental Council for concurrence. In fact, the Department of Land and Natural Resources is scheduled to meet with the Council's Sub-Committee on Exemptions at its February 16 meeting to discuss updating the DLNR exemption list to include exemptions for geothermal energy. The procedure requires project proponents review and analyze what impacts a project might have. Should the decision be made that its environmental impacts are minor then it should be exempted through the system that is in place. We believe the legislature should allow the process to work rather than require the exemption statutorily.

For this reason we respectfully request you hold HB 2689. Thank you for accepting our testimony.

Mary Steiner

A handwritten signature in black ink that reads "Mary Steiner". The signature is written in a cursive, flowing style with a long horizontal line extending to the right.

Chair, Environmental Council



Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803
808.538.6616 hawaii.chapter@sierraclub.org

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION HOUSE COMMITTEE ON WATER, LAND, & OCEAN RESOURCES

February 2, 2012, 9:00 A.M.
(*Testimony is 1 page long*)

TESTIMONY IN OPPOSITION TO HB 2689

Aloha Chair Coffman, Chair Chang, and Committee Members -

The Sierra Club, Hawai'i Chapter, with over 9,000 members and supporters, *opposes* HB 2689. This bill fails to learn the lesson of our past geothermal efforts by attempting to reduce public engagement -- exempting geothermal slim wells from any environmental review -- rather than trying to build community consensus.

The eloquent mandate of Chapter 343 is simple: it requires agencies and developers to tell the truth. The intent of our environmental review law is quite clear—to ask tough questions and disclose impacts of actions using state land or money. The law requires that environmental, cultural, and socio-economic impacts are fully disclosed so that decision makers can make informed decisions about permitted activities.

Chapter 343 also gives the public a voice and an opportunity to be heard.

The proposed bill is unnecessary, because a process exists to deal with minor projects. While the Sierra Club is sympathetic to those who are concerned about the potential for complete environmental reviews being required on projects with little real impact, the law already wisely provides for an exemption process. If a triggered project is truly minor, then it would be excluded via categorical exemption.

To the extent of our knowledge, no party has approached the Environmental Council and requested an exemption for slim wells. This has been done repeatedly in the past for other types of actions.

If slim wells do have environmental risks to the health of our communities and our fragile resources, then why should they be statutorily exempted from analyzing the potential risks, seeking community input, and allowing decision makers to determine how best to mitigate the impacts?

Mahalo for the opportunity to testify.



Date: Thursday, February 2, 2012
Time: 9:00 am
Place: Conference Room 325
Committees: Senate – EEP & WLO

Re: HB 2689 – Relating to Geothermal Energy – Testimony in Strong Support

Aloha Legislators,

The Innovations Development Group (IDG) is a Hawaii based renewable energy Development Corporation owned by Native Hawaiians. It was created to facilitate the development of renewable energy resources of native people, and in summer 2011 presented its development model to legislators of the Energy & Land Committees.

The IDG strongly supports this measure and would like to thank Representative Denny Coffman for introducing it.

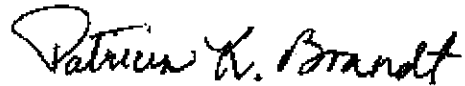
Hawaii is facing an energy and fiscal crisis that requires the immediate and expeditious development of the States geothermal resources, which are “minerals” under state law, and thus, assets of the public trust. Since Statehood was conferred in 1959, the State has had a trust & fiduciary obligation to inventory and develop the renewable energy assets of the public trust, including geothermal resources, which have been found to be the most affordable and reliable source of firm power by the Hawaii Island Geothermal Working Group.

The current energy crisis in our State requires that the State move to expedite testing & exploratory activity, the goal of which is to identify areas suitable for geothermal development. The drilling of ‘test bores’ referred to in this measure as “slim hole wells” is an important part of exploration. Data from such wells will indicate whether development should proceed.

The measure exempts these exploratory wells from the provisions of Chapter 343, but makes clear that there is no exemption for wells used for the development of geothermal resources nor is there an exemption for wells used for production. In order to ensure that there are additional protections for the water aquifer, the measure included specifications for a casing management plan and steam/fluid loss at 5,000 lbs. per square inch.

These protections allow safe testing for geothermal resources to be undertaken immediately without threatening the environment. If data from these exploratory wells is positive, development will proceed only pursuant to the provisions of Chapter 343.

Kind Regards,

A handwritten signature in black ink that reads "Patricia K. Brandt". The signature is written in a cursive style with a large initial 'P'.

Patricia K. Brandt
CEO, IDG



Date: Thursday Feb 2
Time: 9:00 am
Place: Conference Room 325
Committees: Senate – EEP & WLO

Testimony in Strong Support of HB 2689 - Relating to Geothermal Energy

Aloha Legislators,

Indigenous Consultants (IC) is a Hawaii based, indigenous LLC owned and operated by Native Hawaiians. It was created to assist indigenous peoples in developing their renewable energy resources in ways that are: Culturally appropriate, environmentally green and sustainable, socially responsible and economically equitable and affordable. For several years the IC has worked with Innovations Development Group in New Zealand and indigenous Maori developing geothermal resources, which are trust assets of Maori Land Trusts. In addition, the IC has acted as a consultant to other indigenous people in Hawaii and Asia who are addressing development of their trust renewable energy resources in ways that; directly benefit their people, bring in revenues, create small business opportunities and ensure fair & affordable rates to consumers, including themselves and their communities.

The Indigenous Consultants strongly supports this measure and thank Representative Denny Coffman for introducing it.

Hawaii is facing an energy and fiscal crisis that requires the immediate and expeditious development of the States geothermal resources, which are “minerals” under state law, and thus, assets of the public trust. Since Statehood was conferred in 1959, the State has had a trust & fiduciary obligation to inventory and develop the renewable energy assets of the public trust, including geothermal resources, which have been found to be the most affordable and reliable source of firm power by the Hawaii Island Geothermal Working Group.

The current energy crisis in our State requires that the State move to expedite testing & exploratory activity, the goal of which is to identify areas suitable for geothermal development. The drilling of ‘test bores’ referred to in this measure as “slim hole wells” is an important part of exploration. Data from such wells will indicate whether development should proceed.

The measure exempts these exploratory wells from the provisions of Chapter 343, but makes clear that there is no exemption for wells used for the development of geothermal resources nor is there an exemption for wells used for production. In

PO Box 6377 Hilo, Hawaii 96720
Email: mililani.trask@gmail.com
Phone: 808 990 0529

order to ensure that there are additional protections for the water aquifer, the measure included specifications for a casing management plan and steam/fluid loss at 5,000 lbs. per square inch.

These protections allow safe testing for geothermal resources to be undertaken immediately without threatening the environment. If data from these exploratory wells is positive, development will proceed only pursuant to the provisions of Chapter 343.

Regards,

A handwritten signature in black ink, appearing to read 'M. B. Trask', with a horizontal line extending to the right.

Mililani B. Trask
Principal,
Indigenous Consultants



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

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Denny Coffman, Chair
Rep. Derek S.K. Kawakami, Vice Chair

COMMITTEE ON WATER, LAND, & OCEAN RESOURCES

Rep. Jerry L. Chang, Chair
Rep. Sharon E. Har, Vice Chair

DATE: Thursday, February 02, 2012
TIME: 9:00 a.m.
PLACE: Conference Room 325
BILL: HB 2689 RELATING TO GEOTHERMAL COMMENTS

Aloha Chairs Coffman, Chang, Vice Chairs Kawakami, Har and Members of the Committees:

My name is Henry Curtis and I am the Executive Director of Life of the Land, 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.

There appears to be a shift towards greater acceptance of geothermal energy especially due to the replacement of open cycles with closed cycles (that is where geothermal gas returns into the ground rather than being emitted into communities) and with greater cultural sensitivities by geothermal proponents.

However HB 2689 may go to far. It removes the requirement that slim (thinner) geothermal wells need environmental review. There is no mention in the bill that slimmer wells have less impacts. There are no restrictions on the type of conservation land for which this lack of environmental review is proper. Only a statement that it will be allowed. There is no mention of alternative, non-invasive, measures for detecting underground deposits.

Mahalo

kawakami1 - Marissa

From: Harvey Arkin [alohaxtc@gmail.com]
Sent: Wednesday, February 01, 2012 7:25 AM
To: EEPtestimony
Subject: we don't need more statutory exemptions from Chapter 343

Aloha,

The eloquent mandate of Chapter 343 is simple: it requires agencies and developers to tell the truth. The intent of our environmental review law is quite clear—to ask tough questions and disclose impacts of actions using state land or money. The law requires that environmental, cultural, and socio-economic impacts are fully disclosed so that decision makers can make informed decisions about permitted activities.

Chapter 343 also gives the public a voice and an opportunity to be heard.

The proposed bill is unnecessary, because a process exists to deal with minor projects. While the Sierra Club is sympathetic to those who are concerned about the potential for complete environmental reviews being required on projects with little real impact, the law already wisely provides for an exemption process. If a triggered project is truly minor, then it would be excluded via categorical exemption.

To the best of my knowledge, no party has approached the Environmental Council to request an exemption for slim wells. This has been done repeatedly in the past for other types of actions, most recently for certain types of fencing to protect native plants.

If slim wells do have environmental risks to the health of our communities and our fragile resources, then why should they be statutorily exempted from analyzing the potential risks, seeking community input, and allowing decision makers to determine how best to mitigate the impacts?

Mahalo,

Harvey Arkin
3349 Anoi PL
Honolulu, HI 96822
alohaxtc@hawaii.rr.com

kawakami1 - Marissa

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 01, 2012 8:09 AM
To: EEPtestimony
Cc: i.pestana@yahoo.com
Subject: Testimony for HB2689 on 2/2/2012 9:00:00 AM

Testimony for EEP/WLO 2/2/2012 9:00:00 AM HB2689

Conference room: 325
Testifier position: Oppose
Testifier will be present: No
Submitted by: Ikaika Pestana
Organization: Individual
E-mail: i.pestana@yahoo.com
Submitted on: 2/1/2012

Comments:

The proposed bill is unnecessary, because a process exists to deal with minor projects. While the Sierra Club is sympathetic to those who are concerned about the potential for complete environmental reviews being required on projects with little real impact, the law already wisely provides for an exemption process. If a triggered project is truly minor, then it would be excluded via categorical exemption.

To the best of my knowledge, no party has approached the Environmental Council to request an exemption for slim wells. This has been done repeatedly in the past for other types of actions, most recently for certain types of fencing to protect native plants.

If slim wells do have environmental risks to the health of our communities and our fragile resources, then why should they be statutorily exempted from analyzing the potential risks, seeking community input, and allowing decision makers to determine how best to mitigate the impacts?

kawakami1 - Marissa

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 01, 2012 6:45 PM
To: EEPtestimony
Cc: anthuriumz@hotmail.com
Subject: Testimony for HB2689 on 2/2/2012 9:00:00 AM

Testimony for EEP/WLO 2/2/2012 9:00:00 AM HB2689

Conference room: 325
Testifier position: Oppose
Testifier will be present: No
Submitted by: Wynnie Hee
Organization: Individual
E-mail: anthuriumz@hotmail.com
Submitted on: 2/1/2012

Comments:

NO MORE statutory exemptions from Ch.343. We don't need this bill; a process already exists to deal with minor projects. Leave Chapter 343 alone. Thank you.

RE: HB 2689, HB 2690, HB 2691 Relating to Geothermal Development
February 1, 2012

Aloha Members of the House Comm. on Energy and Environmental Protection,

My name is Nelson Ho. I am an appointed member of Senator Russell
Kokubun's Senate Concur. Reso 99-2010 Legislative Geothermal Working Group.

Since 1982 I have been an active proponent of careful land management when a highly
industrial activity like geothermal exploration comes into a rural area or undeveloped
Hawaiian forest landscape.

Reducing the public's ability to review and comment on a major intrusion is foolish. It
engenders hard feelings and persistent organized resistance. That does not promote a
faster track, it just guarantees a more contentious gauntlet. The natural landscape is a
major resource that is already being diminished daily via alien plant and animal pest
invasions. Geothermal energy development can be a very adverse component to the
destruction and disruption.

Please do not go down this counterproductive shortcut as we engage the next level of
energy diversity.

Nelson Ho
Member, Senate Concur. Reso 99-2010 Legislative Geothermal Working Group
Sierra Club Representative