

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

**Testimony of
WILLIAM J. AILA, JR.
Chairperson**

**Before the House Committee on
FINANCE**

**Tuesday, April 3, 2012
3:00 P.M.**

State Capitol, Conference Room 308

**In consideration of
SENATE BILL 3003, SENATE DRAFT 1, HOUSE DRAFT 1
RELATING TO GEOTHERMAL RESOURCES**

Senate Bill 3003, Senate Draft 1, House Draft 1 proposes to differentiate between "geothermal resources exploration" and "geothermal resources development" for the purposes of mining leases and exploration permits; designates "geothermal resources exploration" and "geothermal resources development" as permissible uses in all state land use districts and conservation district zones; and repeals geothermal resource subzone provisions under state land use law. The Department of Land and Natural Resources (Department) strongly supports this measure.

The Department is tasked with the management of geothermal resources and its development to protect the health and safety of the public and to ensure continued viability of the resource. Geothermal resources development in Hawaii is a priority and has contributed to energy diversification in the State. Geothermal energy has proven to be a viable component to meet the State's renewable energy goals which will reduce the dependence on imported fossil fuels.

The intent of the geothermal subzone designation law, enacted in 1983, was to balance geothermal development in the interest in preserving Hawaii's unique social and natural environment and to situate geothermal development in areas of the lowest potential environmental impact. Note that at the time, geothermal development was an untested and fairly controversial initiative for Hawaii. However, for nearly 20 years, Hawaii's only geothermal plant has proven to operate safely in producing clean and sustainable energy for the residents of the Big Island. Removing the geothermal subzone designation process does not eliminate the community's voice in determining where geothermal production occurs. Multiple opportunities for public comment on any proposed geothermal project exist, including compliance with Chapters 343 and 344, Hawaii Revised Statutes, and in public hearings before the Board of Land

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
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

and Natural Resources. Landowner rights would not be affected, as neither geothermal resources exploration nor geothermal resources development can take place without the permission and consent of the surface landowner. Eliminating geothermal subzone designation requirements would reduce a significant amount of time of the regulatory process and encourage developers who are ready and willing to help Hawaii meet its clean energy goals.

This measure will provide opportunities to increase clean renewable energy sources, stimulate job creation and assist the State in addressing current and future energy needs.

Thank you for the opportunity to comment.



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

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Statement of
RICHARD C. LIM
Director
Department of Business, Economic Development, and Tourism
before the
HOUSE COMMITTEE ON FINANCE
Tuesday, April 3, 2012
3 PM
State Capitol, Conference Room 308
in consideration of

**SB 3003, SD1, HD1
RELATING TO GEOTHERMAL RESOURCES.**

Chair Oshiro, Vice Chair Lee, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) **supports** SB 3003, SD1, HD1, which removes the geothermal resource subdivision designation process and refines the definition of “geothermal exploration.”

As this is a geothermal issue, we defer to the proper agency for comment.

The removal of the geothermal subzone designation process will reduce the financial risk associated with geothermal exploration and development by removing some of the regulatory barriers concerning geothermal activities. Geothermal exploration is a costly endeavor without assurance of development unless productive geothermal resources are located. Should the subzone process be removed, opportunities for public comment and agency regulation remain.

In addition, we support DLNR’s pending request to the Environmental Council to exempt certain geothermal exploration activities.

Thank you for the opportunity to offer these comments in support of SB3003 SD1, HD1.



SB3003 SD1 HD1
RELATING TO GEOTHERMAL RESOURCES
House Committee on Finance

April 3, 2012

3:00 p.m.

Room 308

The Office of Hawaiian Affairs (OHA) **OPPOSES** SB3003 SD1 HD1, which would amend several chapters of current statute to allow greater geothermal resource exploration and development.

OHA appreciates the effort to streamline alternative energy exploration and believes that SB3003 SD1 HD1 addresses many former concerns about ensuring proper assessment of environmental impacts. However, the bill still undoes an entire area of law created to respond to the unique hazards created by geothermal exploration and development and to ensure opportunity for public comment in the affected communities.

SB3003 SD1 HD1 proposes repealing the subzone provisions in HRS § 205, which would completely controvert the intent of this legislature to assure that geothermal development would only occur "in areas of the lowest potential environmental impact." Act 296, § 1, 1983 Haw. Sess. Laws 636. Moreover, it is unclear what protections will remain for the most fragile areas of the conservation district if geothermal resource exploration and development are labeled as permissible uses in all zones of the conservation district.

The full range of geothermal exploration and development environmental impacts remain yet unknown. It is unwise to experiment with new technology in the most sensitive of protected regions, including fragile watershed areas and the habitats of threatened or endangered animal and plant species. Further, since geothermal exploration and development may result in emission of noxious gases and noise and ground surface disturbance, the geothermal resource subzone provisions currently in place provide a necessary additional layer of protection and procedural safeguards. These include a public hearing in the proposed affected community and an opportunity for contested case hearing.

Therefore, OHA urges the committee to HOLD SB3003 SD1 HD1. Mahalo for the opportunity to testify on this important measure.



Sierra Club Hawai'i Chapter

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HOUSE COMMITTEE ON FINANCE

April 3, 2012, 3:00 P.M.
(Testimony is 2 pages long)

COMMENTING ON SB 3003 (SD1, HD1)

Aloha Chairs Oshiro and Members of the Committee:

The Sierra Club, Hawai'i Chapter, with 10,000 dues paying members and supporters statewide, offers the following comments to SB 3003 (SD1, HD1). We appreciate that this measure currently does not contain exemptions from Hawaii's environmental review law, Chapter 343.

To the extent this Committee might consider including this exemption, the Sierra Club would oppose SB 3003. Such an effort would fail to learn the lesson of our past geothermal efforts. Projects run into problems when they attempt to reduce the amount of public engagement rather than building 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.

We further question whether geothermal exploration would be a “minor” use of land. From the reports received, exploration might require the clear cutting of approximately one acre of land to do staging for the drilling work. In addition, roads might need to be built to allow for the trucks to transport the large drilling bits to the exploration area (reportedly around 55 meters long). In sensitive, pristine forests this type of excavation plainly is not “minor.”

Moreover, there is a potential to contaminate the aquifer. To the extent that drilling penetrates drinking water resources, it is worthwhile to ensure the potential risks are examined and considered before approving the project.



Date: Tuesday, April 3, 2012
Time: 3:00 pm
Place: Conference Room 308
Committees: House FIN

Re: SB 3003 SD1, HD1 (HSCR 1109-12) – Relating to Geothermal Resources

Aloha Representatives,

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.

This measure differentiates between "geothermal resources exploration" and "geothermal resources development" for purposes of mining leases and exploration permits. It designates "geothermal resources exploration" and "geothermal resources development" as permitted uses in all state land use districts and conservation district zones and repeals geothermal resource subzone provisions under state land use law. In addition, it exempts geothermal resources exploration from environmental assessment and environmental impact statement requirement while ensuring that geothermal resource development conforms to all requirements of Chapter 343.

This bill is badly needed in order to facilitate the immediate exploration of the States geothermal public trust assets in light of the energy & fiscal crisis Hawaii is facing. Exploration for energy is not the same thing as development of energy for production. Thirty years ago, Hawaii's statutes anticipated that the Sate of Hawaii would expend millions of dollars testing the viability of our geothermal resources so that the State could then determine which lands were suitable for geothermal development, and thereafter designate these areas as 'geothermal sub-zones' for private sector development.

Today, we know that geothermal resources are not explored or developed in this manner, (ie. with the State picking up the cost for exploration and sub-zone designation in order to facilitate development of the resources by private parties.) Today, industry practice requires that the private sector undertake exploration in order to determine whether development is feasible, and if the data indicates it is, our Hawaii statutes favor public/private partnerships working together to develop firm power for an energy secure future for our State. Exploration is a business expense for the private sector, but it may not lead to development.

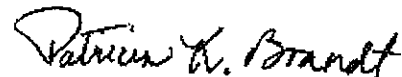
This measure brings State policy in line with industry practice and ensures that exploration will be undertaken, and critical data needed for geothermal resource assessment will be provided to the State, without the State being required to pay for the cost of exploration. It also ensures that all categories of State public trust lands (land use & conservation districts) are available for exploration & data assessment without designating these lands for development. This approach allows the State the State trustee to obtain data needed to locate & assess its geothermal resources, thereby fulfilling its fiduciary obligation to inventory its geothermal renewable energy assets before any geothermal development is approved or undertaken.

Most importantly, this measure does not allow any exemption from Chapter 343 for geothermal development. The clear language of the Bill allows an exemption only for exploration. Any activity that would result in development or production of electricity is still squarely under the provisions of chapter 343.

We support the recommended changes suggested by the DLNR, specifically, "The Department recommends clarifying language in Part II, SECTION 2 to define "lease" to include either a mining lease issued in accordance with Sections 182-4 and 182-5, Hawaii Revised Statutes (HRS) or a surface lease issued in accordance with Section 171-13, HRS. We request the revision of proposed language on page 2, lines 12-14 to read: "§182-No environmental assessment or environmental impact statement required for geothermal resources exploration, or issuance of mining or surface leases on State or reserved lands for purposes of conducting geothermal resources exploration."

Passage of this measure is critical if Hawaii is to address the current energy & fiscal crisis in an expedient and responsible way.

Kind Regards,



Patricia K. Brandt
CEO, IDG

The Pacific Resource
PARTNERSHIP



Testimony of C. Mike Kido
External Affairs
The Pacific Resource Partnership

COMMITTEE ON FINANCE
Rep. Marcus R. Oshiro, Chair
Rep. Marilyn B. Lee, Vice Chair

SB 3003, SD1, HD1 – Relating to Geothermal Resources
Tuesday, April 3, 2012
3:00 PM
Conference Room 308

Aloha Chair Oshiro, Vice Chair Lee and Members of the Committee:

My name is C. Mike Kido, External Affairs of the Pacific Resource Partnership (PRP), a labor-management consortium representing over 240 signatory contractors and the Hawaii Regional Council of Carpenters, formerly the Hawaii Carpenters Union.

SB 3003, SD1, HD1 moves the state closer to its goal of energy independence by streamlining the geothermal exploration process in all the state land use districts and conservation district zones. Appropriate environmental reviews would be conducted should the explorations prove promising and an entity wishes to take the next step in geothermal resources development.

This measure will reduce the amount of time required to explore geothermal resources. Expediting the development of a firm source of renewable energy will benefit the public by reducing electricity rates throughout the State in the near future.

We respectfully ask for your **support** on SB 3003, SD1, HD1. Thank you for the opportunity to share our view with you.



Indigenous Consultants, LLC

Mililani B. Trask, Principal

P.O.Box 6377 ❖ Hilo, HI 96720

Mililani.trask@gmail.com



Date: Tuesday, April 3, 2012

Time: 3:00 pm

Place: Conference Room 308

Committees: House – FIN

Re: SB 3003 SD1, HD1 (HSCR 1109-12) – Relating to Geothermal Resources

Aloha Representatives,

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.

Testimony in Strong Support

This measure differentiates between "geothermal resources exploration" and "geothermal resources development" for purposes of mining leases and exploration permits. It designates "geothermal resources exploration" and "geothermal resources development" as permitted uses in all state land use districts and conservation district zones and repeals geothermal resource subzone provisions under state land use law. In addition, it exempts geothermal resources exploration from environmental assessment and environmental impact statement requirement while ensuring that geothermal resource development conforms to all requirements of Chapter 343.

This bill is badly needed in order to facilitate the immediate exploration of the States geothermal public trust assets in light of the energy & fiscal crisis Hawaii is facing. Exploration for energy is not the same thing as development of energy for production.

Thirty years ago, Hawaii's statutes anticipated that the State of Hawaii would expend millions of dollars testing the viability of our geothermal resources so that the State could then determine which lands were suitable for geothermal development, and thereafter designate these areas as 'geothermal sub-zones' for private sector development.

Today, we know that geothermal resources are not explored or developed in this manner, (ie. with the State picking up the cost for exploration and sub-zone designation in order to facilitate development of the resources by private parties.) Today, industry practice requires that the private sector undertake exploration in order to determine whether development is feasible, and if the data indicates it is, our Hawaii statutes favor public/private partnerships working together to develop firm power for an energy secure future for our State. Exploration is a business expense for the private sector, but it may not lead to development.

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We support the recommended changes suggested by the DLNR, specifically, "The Department recommends clarifying language in Part II, SECTION 2 to define "lease" to include either a mining lease issued in accordance with Sections 182-4 and 182-5, Hawaii Revised Statutes (HRS) or a surface lease issued in accordance with Section 171-13, HRS. We request the revision of proposed language on page 2, lines 12-14 to read: "§182-No environmental assessment or environmental impact statement required for geothermal resources exploration, or issuance of mining or surface leases on State or reserved lands for purposes of conducting geothermal resources exploration." Passage of this measure is critical if Hawaii is to address the current energy & fiscal crisis in an expedient and responsible way.

Regards,



Mililani B. Trask – Indigenous Consultants LLC



April 3, 2012

Honorable Marcus R. Oshiro, Chair
Honorable Marilyn B. Lee, Vice Chair
House Committee on Finance

Re: **Support of SB 3003 SD1 HD1 - Relating to Geothermal Resources**
Conference Room 308- 3:00 P.M.; Agenda #2

Dear Chair Oshiro, Vice Chair Lee, and Members of the Committee:

Since 2004, Ormat Technologies, Inc. has operated the Puna geothermal power plant which now boasts a current generating capacity of 38 MW. Puna Geothermal Venture has been in commercial operation since 1993. Most recently, Ormat completed the construction and is working towards declaration of commercial operation of an 8 MW expansion to provide even more clean, renewable energy to the residents and businesses of Hawaii County.

SB 3003 SD1 HD1 amends Chapters 182, 183C, 343 and 205 of the Hawaii Revised Statutes by including geothermal resources exploration and development as permitted uses within the various state land use districts; and, by removing the geothermal subzone designation process as a required step before such exploration and development may occur. Ormat would like to offer these comments in support of SB 3003 SD1 HD1:

Much of Hawaii contains undeveloped geothermal resources which have the potential for benefitting the State of Hawaii. In order to harness that potential, it is imperative that developers are able to conduct exploration and development efforts in a timely manner. Therefore, Ormat supports legislation that will reduce current barriers to geothermal exploration and development and to streamline the current regulatory process. In Ormat's humble opinion, the suggested amendments would not diminish the protections afforded to landowners, the environment or the general public related to any activity that would result in development or the production of electricity, which would remain subject to the provisions of Chapter 343 on State or other lands for which the statute applies.

ORMAT TECHNOLOGIES, INC.

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Keeping the goal of streamlining the regulatory process in mind, Ormat supports the portion of this bill which removes the geothermal subzone designation requirement. This step in the process is unnecessary, costly and time consuming. If a location has the potential for the production of renewable geothermal energy, the development of the site can be properly authorized through a permitting and review process which is not dependent upon prior subzone designation.

Thank you for the opportunity to provide our comments and for your consideration of our support for this proposed legislation.

Best Regards,

A handwritten signature in black ink that reads "Paul A. Thomsen". The signature is written in a cursive style with a long horizontal line extending from the end.

Paul A. Thomsen
Director
Ormat Technologies, Inc.

CHRISTOPHER J. YUEN
ATTORNEY AT LAW

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April 2, 2012

Re: SB3003, HD1

Rep. Marcus Oshiro, Chair, and members of the House Finance Committee:

SB3003 HD1, concerning geothermal development, has serious problems, which the legislative history suggests may not be intentional. Unless this bill is amended, a geothermal power plant could be built anywhere in the state land use agricultural or rural districts—even across the street from a residential neighborhood—without any county land use permit or public hearing. Because SB3003 HD1 says that geothermal development is a “permitted use” in the agricultural or rural districts, it would be treated like a barn or any other land use that is routinely allowed as a matter of right.

I was Planning Director of Hawai'i County from December 2000 to December 2008, and Hawai'i Island member of the Board of Land and Natural Resources from 1990 to 1998. I was the Planning Director when Puna Geothermal Venture received an amendment to its Geothermal Resource Permit to expand from 30 megawatts to 60 megawatts in 2001, and I supported that expansion. I strongly support further expansion of geothermal energy, which is our best current option for local power production without generating greenhouse gases. But it needs safeguards.

A geothermal power plant is a major industrial facility. In Hawai'i County, at least half the population lives in the agricultural district, and on all islands, residential neighborhoods are intermingled within and next to the agricultural district. We shouldn't allow such major facilities without special scrutiny. And there is a possibility of a catastrophic event, like the well blowout in 1991. The impacts may be different in different areas. For example, the level of hydrogen sulfide may be different. Wind energy and photovoltaic power, by contrast, are relatively predictable in terms of the type of facility and the impacts that can be expected.

Poor controls on geothermal development in its early history in Puna caused much of the resistance encountered since. The public must feel that it has some meaningful input.

We can't rely on the Chap. 343 process to solve potential environmental problems because the typical geothermal development on private urban, agricultural, or rural lands will not trigger an environmental assessment or an EIS.

Under current law, geothermal development needs a geothermal resource permit (GRP), which is issued by the BLNR in the conservation district, and the county planning commission in the urban, agricultural or rural districts. The GRP for PGV, for example, contains safeguards such as an emergency response plan, and limits on noise and hydrogen sulfide emissions. Ironically, doing away with the GRP process may backfire if a court finds that having no permit requirement violates an aggrieved person's right to due process. In contrast, the current GRP process has been upheld by the courts. Medeiros vs. Hawaii County Planning Commission, 8 Haw. App. 183, 797 P. 2d 59 (1990).

The GRP process, HRS sec. 205-5.1(c)-(h), was devised to be quicker and simpler for geothermal development than the typical process for a conservation district use permit or a county special permit in the agricultural or rural areas. It doesn't allow a contested case hearing, which can be complex and time-consuming, has a six month time limit (which can be extended with the consent of the applicant), has a direct appeal to the intermediate court of appeals, and doesn't require LUC approval, unlike a normal special permit for areas exceeding 15 acres. Its deletion in SB3003 HD1 means that in the conservation district, the process for permits for geothermal exploration and development will default to the regular process for a conservation district use permit, which can potentially be much more onerous, and, as previously discussed, in the agricultural and rural districts, there will be no discretionary land use permit at all.

SB3003 HD1 meets its goal of significantly encouraging and streamlining geothermal development by taking out the requirement in current law that the BLNR first authorize such development by delineating a "geothermal resource subzone". This can be done without affecting county land use permitting.

To fix the problems with SB3003 HD1, the Committee should amend it as follows:

--Bill Sec. 6: change the new HRS sec. 205-2(d)(13) so it reads as follows:
"Geothermal resources exploration and geothermal resources development, as defined under section 182-1, and, for geothermal resources development, as allowed in sec. 205-5.1."

--Bill Sec. 7: change the new HRS sec. 205-4.5(a)(20) to read as follows:

“Geothermal resources exploration and geothermal resources development, as defined under section 182-1, and, for geothermal resources development, as allowed in sec. 205-5.1.”

--Bill Sec. 8: change the new HRS sec. 205-5(c)(5) to read as follows:
“Geothermal resources exploration and geothermal resources development, as defined under section 182-1, and, for geothermal resources development, as allowed in sec. 205-5.1.”

--Bill Sec. 9: Do not repeal HRS sec. 205-5.1(c), (d), (e), (f), (g), and (h), but delete references in these subsections to “geothermal resource subzones” and change the references to “geothermal development activities” to “geothermal resources development.”

Please note that these changes will allow geothermal **exploration** in the rural and agricultural districts without a GRP, but geothermal **development** would still need a GRP. This is a reasonable streamlining of the process.

By making these amendments, the Legislature can pass a bill that significantly streamlines the process for geothermal development, without depriving county authorities of the power to have reasonable safeguards.

Thank you for the opportunity to comment on this bill.

Yours truly,

Chris Yuen