DAVID Y. IGE GOVERNOR

LUIS P. SALAVERIA DIRECTOR

MARY ALICE EVANS DEPUTY DIRECTOR



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Web site: www.hawaii.gov/dbedt Telephone: (8 Fax: (8

(808) 586-2355 (808) 586-2377

Statement of LUIS P. SALAVERIA Director Department of Business, Economic Development, and Tourism before the HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION AND WATER AND LAND

> Tuesday, March 22, 2016 11:00 a.m. State Capitol, Conference Room 325

> > in consideration of **SB 2535, SD2**

RELATING TO GEOTHERMAL.

Chairs Lee and Yamane, Vice Chairs Lowen and Cullen, and Members of the Committees.

The Department of Business, Economic Development, and Tourism (DBEDT) offers <u>comments</u> on SB 2535, SD2, which concerns county and state authorities to permit geothermal resources exploration and development, and reserves geothermal exploration and development to the State unless delegated to the Counties by statute. The SD2 changes the effective date of this measure to January 1, 2050, to facilitate further discussion.

DBEDT supports the re-establishment of county zoning authority to regulate geothermal development on urban, rural, and agricultural land to provide the appropriate framework to balance economic, technical, environmental, and cultural considerations. Similarly, DBEDT also supports the Department of Land and Natural Resources' (DLNR) authority to regulate geothermal on Conservation land.

DBEDT is concerned that this measure does not clearly re-establish the zoning authorities or processes to regulate geothermal resources exploration and development. For example, there is no discussion of the specific permit process to be used to regulate geothermal exploration and

development, nor does the measure currently provide guidance to the agencies on permit approval criteria. Defined geothermal permitting processes allow for effective decision making and reduced project risk, which are in the best interest of the state as a whole.

As this measure concerns State authority to regulate mining operations and geothermal resources development and exploration, including drilling conditions and restrictions, we defer to DLNR on these matters.

Thank you for the opportunity to offer these comments on SB 2535, SD2.

DAVID Y. IGE GOVERNOR OF HAWAII





SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA

JEFFERY T. PEARSON, P.E. DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES BOATING AND OCEAN RECREATION BUREAU OF CONVEYANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT ENGINEERING FORESTRY AND WILDLIFE HISTORIC PRESERVATION KAHOOLAWE ISLAND RESERVE COMMISSION LAND STATE PARKS

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

Testimony of SUZANNE D. CASE Chairperson

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

> Tuesday, March 22, 2016 11:00 A.M. State Capitol, Conference Room 325

In consideration of SENATE BILL 2535, SENATE DRAFT 2 RELATING TO GEOTHERMAL

Senate Bill 2535, Senate Draft 2 proposes to: (1) clarify that the regulation of geothermal resources development and geothermal resources exploration is reserved to the State unless delegated to the counties by statute; (2) require the lessee of a mining lease to comply with all water and air pollution control laws, relating to building, grading, and flood control codes; and (3) require the rules of the board of land and natural resources regarding mining operations, geothermal resource development, and geothermal resource exploration, including drilling conditions and restrictions, to be uniform throughout the State. **The Department of Land and Natural Resources (Department) supports the intent of this bill that reaffirm that the State is the regulatory authority for mining operations and drilling conditions and restrictions for geothermal resources exploration and development, which should be uniform throughout the State.**

Geothermal development in Hawaii has contributed to a greater energy diversification of the State. Accordingly, effective management of the resource and its development is vital to protect the health and safety of the public and to ensure the continued viability of this Public Trust Resource for future generations.

In accordance with existing Hawaii Administrative Rules¹, the Department is responsible for: (1) The leasing of geothermal resources on state or reserved lands; and

¹ Hawaii Administrative Rules, Title 13, Chapter 183, Rules on Leasing and Drilling of Geothermal Resources

(2) The regulation of all drilling of geothermal resources in Hawaii

These authorities are to ensure that the proper management of geothermal resources are in place for the purpose of: (1) preventing waste; (2) conserving and providing for the optimum use of the resource; (3) minimizing or preventing degradation of the environment, surface and ground waters, and other natural resources; and (4) preventing injury to life and property.

Thank you for the opportunity to testify on this measure.



SB2535 SD2 RELATING TO GEOTHERMAL

House Committee on Energy & Environmental Protection Committee on Water & Land

March 22, 2016 11:00 a.m. Room 3.	22, 2016
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The Office of Hawaiian Affairs (OHA) offers the following <u>COMMENTS</u> for SB2535 SD2, which gives the state the exclusive authority to regulate all geothermal resources development and exploration activities, and limits the counties' regulatory authority to what is explicitly delegated to the counties. Further, the bill mandates statewide uniformity on rules for mining operations, geothermal resources development, and geothermal resources exploration, including drilling conditions and restrictions.

OHA appreciates that this bill intends to clarify when state, rather than county, regulations apply. However, OHA notes that SB2535 SD2 appears to nullify local procedures in place in Hawai'i and Maui counties without replacing them with alternative procedural safeguards for geothermal resource development. If the invalidation of important county-level procedural safeguards is intentional, OHA recommends the Committees consider including procedural safeguards that provide for clear and transparent processes, as discussed below.

Prior to 2012 and the enactment of Act 97 (2012), the permitting process for geothermal resources development and exploration was clearly laid out in statute. Among other provisions, Act 97 repealed HRS § 205-5.1, which described public hearing and mediation requirements, criteria for permit approval, appellate jurisdiction, and a list of what must be included in a record of decision relating to geothermal development activities. Currently, the only remaining permitting procedures for geothermal development may be found in Hawai'i and Maui County Planning Commission Rules of Practice and Procedure.

If this bill passes, the public may be left with substantial uncertainty related to how geothermal resources development may occur in future, and with fewer established opportunities to provide input and to participate in the decision-making process through public hearings, mediation, or the appeals process. Therefore, OHA recommends that any changes to the permitting process for geothermal resources development minimally include the following: public hearing provisions that provide the public with sufficient opportunities to provide input; hearing notification provisions to ensure that the public, particularly people who reside or spend time in the vicinity of the proposed project, are notified of any proposed geothermal project in a timely fashion; criteria for approval that ensure that the permitting entity considers environmental, cultural, social, and public health and safety impacts of any proposed project; and a process whereby interested parties may participate in decision-making and appeal the permitting entity's final decision.

Mahalo for the opportunity to testify on this measure.





808-737-4977

1259 A'ala Street, Suite 300 Honolulu, HI 96817

March 22, 2016

The Honorable Chris Lee, Chair House Committee on Energy & Environmental Protection The Honorable Ryan I. Yamane, Chair House Committee on Water & Land State Capitol, Room 325 Honolulu, Hawaii 96813

RE: S.B. 2535, S.D.2, Relating to Geothermal

HEARING: Tuesday, March 22, 2016 at 11:00 a.m.

Aloha Chair Lee, Chair Yamane, and Members of the Committees:

I am Mary Begier, Government Affairs Committee Member, submitting written testimony on behalf of the Hawai'i Association of REALTORS[®] ("HAR"), the voice of real estate in Hawai'i, and its 8,900 members. HAR **supports** S.B. 2535, S.D.2 which:

- 1. Clarifies that the regulation of geothermal resources development and geothermal resources exploration is reserved to the State unless delegated to the counties by statute;
- 2. Requires the lessee of a mining lease to comply with all water and air pollution control laws, relating to building, grading, and flood control codes
- 3. Requires the rules of the board of land and natural resources regarding mining operations, geothermal resource development, and geothermal resource exploration, including drilling conditions and restrictions, to be uniform throughout the State.

There are multiple benefits which geothermal power production has for consumers and the public. For example, the current production of power from geothermal energy not only dramatically decreases the State's dependence on fossil fuels (current displacement is equivalent to 300,000 barrels of oil per year from the existing facility in Puna), the on demand power which is available from geothermal power production on a 24/7 basis allows the energy grid to absorb more power from fluctuating renewable sources such as wind and solar energy.

On the Big Island, geothermal energy has proven itself to be a source of reliable and cost efficient power which provides stable cost efficient power of 20% of the island population, and which also serves as a lower rate source during evening hours to charge electric vehicles.







Geothermal power fosters the ability to sustain housing opportunities which are affordable and provide flexibility in housing options. It can lessen costs to those who purchase power from the energy grid, and can allow more net energy metering from PV systems to be linked to the grid.

Already highly regulated by the EPA and the State of Hawaii, geothermal energy exploration and production activities have been proven to be a safe and clean operation which operates under a closed loop system that emits little to no emissions. The highest pollution emissions continue to emanate from plants which burn fossil or other fuels, which only increase the rate of climate change.

The adoption of local county regulations can conflict with State regulation and interfere with the ability of a geothermal energy producer to safely and efficiently conduct exploration or production activities, leading to an increase in the cost of production or discourage investment in the production of additional geothermal energy power.

A geothermal energy producer should be allowed to comply with regulations adopted by the EPA and the State, and county efforts to impose improper restrictions which can compromise safety should be preempted. As an example, a recent County of Hawaii ordinance purports to prohibit all night time drilling operations which include safety protocols which are mandated by the State to protect water resources and the environment. Despite rational opposition from representatives of DLNR who voiced strong concerns about the safety and cost aspects of such restrictions, the ordinance was adopted.

A uniform system of regulation by the State of Hawaii is necessary to further the State's renewable energy goals.

Mahalo for the opportunity to submit written testimony.





HAWAII LABORERS-EMPLOYERS COOPERATION AND EDUCATION TRUST 650 Iwilei Road, Suite 285 · Honolulu, HI 96817 · Phone: 808-845-3238 · Fax: 808-845-8300

TESTIMONY OF HAWAII LECET CLYDE T. HAYASHI - DIRECTOR

THE HOUSE THE TWENTY-EIGHTH LEGISLATURE REGULAR SESSION OF 2016

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

COMMITTEE ON WATER & LAND

Rep. Ryan I. Yamane, Chair Rep. Ty J.K. Cullen, Vice Chair

NOTICE OF HEARING

DATE: Tuesday, March 22, 2016 TIME: 11:00am PLACE: Conference Room 325 State Capitol 415 South Beretania Street

<u>AGENDA</u>

TESTIMONY ON SENATE BILL NO. 2535, SD2, RELATING TO GEOTHERMAL

TO COMMITTEE CHAIRS, COMMITTEE VICE CHAIRS, AND MEMBERS OF THE COMMITTEES:

My name is Clyde T. Hayashi, and I am the Director of Hawaii LECET. Hawaii LECET is a labormanagement partnership between the Hawaii Laborers Union, Local 368, and its unionized contractors.

Mahalo for the opportunity to testify in <u>SUPPORT</u> of Senate Bill No. 2535, SD2.

We support the development of geothermal energy as a needed firm, renewable source of energy which is critical in Hawaii achieving our goal of 100% renewable energy by 2045. On Hawaii Island, about 25% of the island's energy needs are provided by geothermal energy. Currently, geothermal energy is the only firm, "dispatchable" energy resource.

SB 2535 will clarify that the State will oversee any geothermal drilling operations. The DLNR is the only State Agency with the expertise and authority to issue geothermal well permits. DLNR rules and requirements ensure that there will be no compromise of safety and that it will be uniform throughout the State.

For these reasons, we <u>support</u> Senate Bill No. 2535, and humbly ask that it passes these committees.



209 Pennsylvania Avenue SE, Washington, D.C. 20003 U.S.A. Phone: (202) 454-5261 Fax: (202) 454-5265 Web Site: <u>www.gco-energy.org</u>

March 21st, 2016

THE HOUSE OF REPRESENTATIVES THE TWENTY-EIGHTH LEGISLATURE REGULAR SESSION OF 2016 Tuesday, March 22, 2016, 11:00 a.m. Conference Room 325 State Capitol 415 South Beretania Street Hearing on SB 2535, SD2 (SSCR2625)

Representative Chris Lee, Chair, Representative Ryan Yamane, Chair; COMMITTEES on ENERGY & ENVIRONMENTAL PROTECTION and WATER & LAND and members of the Committees:

Thank you for the opportunity to provide testimony on SB 2535. The Geothermal Energy Association supports the purpose and intent of this legislation. Geothermal resources have substantial untapped potential in Hawaii that could provide reliable clean power to help the State of Hawaii comply with its 100% renewable energy generation 2045 goal. Studies of Hawaii's Geothermal resources have found anywhere from 1.5 GW to 2.6 GW of identifiable geothermal resources¹ spread among Hawaii's islands. This is enough power to replace all of the fossil fuel electricity generation used by the state at reasonable cost.

SB 2535 will bring geothermal oversight on par with other state geothermal regulations. In other states such as Nevada and California, geothermal development is regulated exclusively at the state level by trained engineers and scientist who have expertise in the latest technological developments. Dividing regulation between state and county authorities can slow development, raise costs, and discourage growth of this important renewable energy technology for Hawaii's future.

Furthermore GEA published a "Best Practices for Geothermal Power Risk Reduction Workshop Follow-Up Manual" with the US. State Department in 2014 and found "Minimize the number of agencies of institutions involved with regulation—"one-stop shopping" is the ideal model."² GEA believe the state government has the stronger institutional capacity and capability to regulate geothermal development safely and effectively.

Hawaii only stands to benefit from encouraging growth of these resources. Geothermal power provides a number of other important values to the State of Hawaii, including:

¹ GeothermEx Inc. 2005. "Assessment of Energy Reserves and Costs of Geothermal Resources In Hawaii." Richmond, California: Department of Business, Economic Development, and Tourism.

Williams, Colin F., Reed, Marshall J., Mariner, Robert H., DeAngelo, Jacob, Galanis, S. Peter, Jr., 2008, Assessment of moderate- and high-temperature geothermal resources of the United States: U.S. Geological Survey Fact Sheet 2008-3082, 4 p.

² Matek, Benjamin, and Cori Sue Morris. 2014. "Geothermal Best Practices Publication for Geothermal Power Risk Reduction Workshop Follow-Up Manual." Washington DC: Geothermal Energy Association & U.S. State Department.



Permanent jobs. Over the 30-40 year lifetime of the plant that cannot be exported. Geothermal power employs about 1.17 full time staff/ MW of operational capacity.

Property Taxes. Over the 30 to 50 years an average size 20 MW facility will pay nearly \$6.3 to \$11 million dollars in property taxes.

Island Energy Security. Geothermal energy is a domestic energy resource that does not require carbonintensive fuel to operate. Geothermal power can displace use of fossil fuels, thereby reducing Hawaii's reliance on foreign fuel markets and providing stable electricity prices to Hawaiians.

Environmental Protection. Unlike oil and gas exploration which extracts resources, impacts the surrounding environment, and then leaves a community, geothermal power plants are more successful when they are built in harmony with the surrounding environment and community. When geothermal developers move into a community they plan to operate these facilities for decades if not longer. Often those employed at these facilities are also members of the community and live near the power plants. As a demonstration of this principle, drilling operations at PGV accomplished noise reduction to a level that was consistent with DOH standards for residential areas, even though PGV's operations are located in an area zoned agricultural. In addition, exploration thus far has accomplished all DLNR protocols that protect ground water, protect geologic integrity, prevent well blowouts, and ultimately maintain safety of plant personnel and the public.

Sincerely,

Karl Gawell Executive Director Geothermal Energy Association (GEA) 209 Pennsylvania Ave. SE, Washington, DC 20003 (202) 454 – 4264



Hawai'i Island Chamber of Commerce

117 Keawe Street, Suite 205 Hilo, Hawai'i 96720-2851 Phone: (808) 935-7178 Fax: (808) 961-4435

THE HOUSE OF REPRESENTATIVES THE TWENTY-EIGHTH LEGISLATURE REGULAR SESSION OF 2016 Tuesday, March 22, 2016, 11:00 a.m. Conference Room 325 State Capitol 415 South Beretania Street Hearing on SB 2535, SD2 (SSCR2625)

Representative Chris Lee, Chair, Representative Ryan Yamane, Chair; COMMITTEES on ENERGY & ENVIRONMENTAL PROTECTION and WATER & LAND and members of the Committees:

RE: Statement in Support of SB2535 (SD2)

Thank you for the opportunity to provide testimony to the committees on **Energy & Environmental Protection** and **Water & Land** on an issue that is important to all who live on our Island.

With more than 230 member businesses and over 490 member representatives, the Chamber serves as the voice of business on Hawai'i Island.

In 2015, the State of Hawai'i passed a law requiring that Hawai'i reach 100% renewable energy by the year 2045. Geothermal energy has played a substantial role on the energy needs of Hawai'i Island to date and should play a key role in meeting the State's ambitious new target. SB 2535 (SD2) will help facilitate the entire State of Hawaii's ability to safely and economically develop additional geothermal resources throughout the State.

Geothermal energy has been in safe commercial operation in Hawai'i since 1993. Geothermal energy has been providing up to 25% of all the energy consumed annually on Hawai'i Island. The economic boost and decreased reliance on fossil fuels as a result of geothermal energy is in line with County and State goals for using our own indigenous source of renewable energy.

The Chamber therefore supports SB2535 (SD2).

Very Truly Yours.

Ka'iu Kimura President



Puna Pono Alliance PO Box 492668 Kea`au, HI 96749 web: http://punapono.com

email: info@punapono.com

March 19, 2016

To: House Committee on Energy & Environmental Protection Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

House Committee on Water & Land Rep. Ryan I. Yamane, Chair Rep. Ty J.K. Cullen , Vice-Chair

Re: SB2535 SD2 (relating to geothermal) – *strongly oppose* Hearing on Tuesday, March 22, 2016, at 11:00 a.m. in Conference Room 325

Aloha Representatives:

Puna Pono Alliance (PPA) is a community organization concerned with adverse impacts from Puna Geothermal Venture (PGV), the only geothermal site in Hawai`i. We strongly oppose SB2535 SD2 for many reasons, including those stated below. You are considering a bill to save costs for PGV by preempting -i.e., shutting down - a primary source of regulatory activity that affects the company -i.e., the County of Hawai`i. We *strongly oppose* SB2535 SD1 because:

- (1) SB2535 SD2 would *preempt* county authority in geothermal matters
- (2) it would interfere with *ongoing litigation* in the Third Circuit Court
- (3) it would confer a *special benefit* upon PGV
- (4) *state regulation* of PGV has been seriously lacking

Geothermal gained support in Hawai`i because people want to believe it is a clean, safe and renewable alternative energy. However, a September 2013 multi-disciplinary *Geothermal Public Health Assessment* report (the Adler report) that was funded by the County of Hawai`i acknowledged "risks from geothermal energy production in Lower Puna exist … fluids inevitably escape to air, water, or at surface level. Harmful effects can only be understood through better monitoring and reliable health data." The report made numerous remedial recommendations.

The geothermal industry is supported by powerful public relations and has broad political support, but is not what it is advertised to be – it is *not clean, safe or renewable*. We see locally how it is not renewable. A March 6, 2016, <u>news report</u> said production at PGV, that "contracts with Hawaii Electric Light Co. to provide up to 38 megawatts of renewable energy, averaged only 24.7 megawatts during the state's last fiscal year, according to a report to the Legislature."

Mike Kaleikini, senior director of Hawaii affairs for Ormat Technologies, which operates PGV, said the plant is now producing 30 megawatts. "There's still more work to be done overall," he said, when asked how the plant will increase production, and whether more wells will be needed. "We got some plans in the works," Kaleikini added, without providing specifics. "We don't have any firm plans."

The same report says "Ormat is facing a lawsuit in federal court alleging that it defrauded the federal government of \$13.8 million in stimulus funds for [PGV] expansion, which increased its capacity to 38 megawatts. The company denies the claim." \$13.8 million dollars can go a long way to compensate for lost profits ... what condition would PGV be in without the federal boost?

Economics is not a strong suit in the geothermal industry. Ross Beaty, the founder and Chairman of Alterra Power, has <u>commented</u> on his investment in geothermal energy: "in 2008 I started a renewable energy company focused on geothermal power production.... After a couple of years and investment of about \$150 million ... I became quite disillusioned about the ability of geothermal power to be anything other than a bit player in the world energy equation. Reality triumphed over my idealism.... Theoretically, geothermal energy is everywhere.... But in reality, commercial geothermal electricity production is an extremely tough and risky business."

One of the bidders in HELCO's February 28, 2013, request for proposals (RFP) for a new facility to produce electricity using geothermal energy, Chevron, is <u>reported</u> to now be working towards a \$3 billion divestiture of more than 1300 megawatts of Asian geothermal assets. That fact, combined with the realities described by Mr. Beaty and Mr. Kaleikini, as noted above, can give an accurate picture of the economic frailty of geothermal development.

The best illustration of the problem may be seen in HELCO's RFP. Ormat, the primary owner of PGV, was the only company meeting the final bid requirements. Ormat then entered negotiations with HELCO to provide an additional twenty-five megawatts of electricity at twelve cents per kilowatt-hour. However, in mid-December 2015 Ormat <u>withdrew</u> after determining development of the project *would not be financially viable*.

On June 18, 2014, the Consumer Advocate said about the RFP: "any bids that have been submitted for new geothermal generation on the Island of Hawaii should be able to demonstrate clear cost reduction benefits. Further, given the current renewable energy penetration levels, the prevailing electricity prices on the Island of Hawaii, and no urgent need for new generation, such cost reduction should not be set just below the current avoided cost; it should be significantly lower." That is a sensible view of how new renewable energy projects should be evaluated.

Pumped-storage hydroelectric generation has been proposed on Parker Ranch lands. A number of new clean and renewable energy projects are being advanced. Only a sentimental optimism supports the notion that geothermal energy is needed. It really is not needed because of economics – and because it is unclean, unsafe and not renewable. A sensible view of how new renewable energy projects should be evaluated excludes the geothermal option. That is a

fact of modern life in Hawai'i – one that is hard to swallow by long-time geothermal supporters. But in time even they may see the value of less expensive and safer forms of energy production.

PGV's income follows its electricity sales, and those have been in decline as available geothermal energy decreases. PGV's new wells have not been sufficient to maintain the level of production anticipated by its contract with HELCO. Additional costs of drilling in compliance with the law are no doubt a matter of serious concern to those keeping an eye on PGV profits, just as Ormat, principal owner of PGV, felt the pinch of financial non-viability leading it to bail out of contract negotiations for a new Hawai`i geothermal project with HELCO.

In 2012 PGV's drilling of a new geothermal well continually disturbed its neighbors – in extensive testimony Hawai`i County's Council heard about families unable to sleep and children unable to do homework. An outpouring of complaints about noise and vibration led the Council to pass Bill 292. When signed by the Mayor on December 5, 2012, it became Ordinance 12-151, and part of the Hawai`i County Code, with § 14-114, saying "Geothermal resources exploration drilling and geothermal production drilling operations being conducted one mile or less from a residence, shall be restricted to the operating hours of 7:00 a.m. – 7:00 p.m". The law illustrates how local government was responsive to legitimate community concerns.

In 2015 PGV began to drill another new well – ignoring the county ban by continuous drilling– 24 hours a day, seven days a week. That led to pending litigation to enforce the night drilling ban in *Puna Pono Alliance vs. Puna Geothermal Venture*, Third Circuit Civil No. 15-1-0034. An April 15, 2015, news article titled *Judge rejects request to dismiss PGV lawsuit* said "PGV's attorney, Thomas Yeh, told the judge the ordinance 'is pre-empted by state law and the comprehensive framework that exists" before Hilo Circuit Judge Greg Nakamura denied PGV's motion to dismiss the lawsuit. If PGV had confidence in its litigation position under existing law it would not be trying to change existing law through SB2535.

PGV likes to claim the law jeopardizes safety, but admits it can drill in compliance with the law. PGV's actual argument against the law is economic. The law was passed because night drilling is seriously disruptive in the community. The conflict is thus between community peace and PGV costs. If you want to politically support PGV's profits why not just vote to pay them for their added costs of non-continuous drilling and leave the existing laws as they are?

The description of this proposed legislation says it clarifies that regulation of geothermal is reserved to the State unless delegated to the counties by statute, suggesting it merely clarifies how the counties are already pre-empted by state law in geothermal matters – as was argued in by PGV in its unsuccessful court motion – *that is not true*. SB2535 proposes a radical change in Hawai`i law by categorically preempting county authority to act on geothermal matters.

Existing *state law on drilling requires PGV to comply with county law*, as can be seen in § 3 of SB2535 SD2 that would amend HRS § 182-7 from saying a geothermal company must comply with "rules of the State, and other laws of its political subdivisions" to complying with county laws only in matters of building, grading, and flood control. Like existing HRS § 182-7,

DLNR rules §13-183-54(b), governing PGV's state geothermal lease, requires PGV to "comply with all of the requirements, laws, rules, and regulations of the United States, the State and the appropriate county pertaining to the use of the premises or conduct of the operation."

Department of Health rules, in HAR §11-46-13, provide that a county "may adopt and provide for the enforcement of ordinances regulating any matter relating to excessive noise" and that "in any case of conflict between the statute or rule and ordinance, the law which affords the most protection to the public shall apply." That is exactly what Hawai`i County did by enacting the night drilling ban that has been ignored by PGV, resulting in the litigation that led to this bill.

Existing state laws and regulations plainly show county authority in geothermal matters is *not preempted* but *is a recognized part of the overall framework of geothermal regulation*. In 2012, Act 97 repealed former state land use laws that regulated geothermal development. That means the narrower DLNR and DOH authorities are the entirety of state geothermal regulation. Neither agency has been responsive to concerns expressed by the community, making Hawai`i County the only viable government recourse for the community.

§ 2 of SB2535 proposes amending HRS §46-1.5, titled *General powers and limitation of the counties*, to say "regulation of geothermal resources development and geothermal resources exploration, as those terms are defined in section 182-1, shall be reserved to the State unless delegated to the counties by statute". That is a categorical preemption of county authority in the broadest terms regarding geothermal matters (in fact, it makes superfluous the amendment of HRS § 182-7 proposed by SB2535 § 3 regarding drilling). *It is a radical change of existing law.*

Legislators not representing constituents in the vicinity of PGV probably do not consider how PGV is a large, dangerous, and largely unregulated industrial operation situated within a developed suburban cluster. The County is charged with responding to problems that arise as a consequence of geothermal operations. DOH has shown it is unable and unwilling to provide a competent monitoring system or safeguards in the event of emergency upset conditions. DLNR simply approves a new drilling permit when PGV wants to drill new wells. Those and additional reasons compet the need for county oversight of geothermal operations.

Senate testimony of Hawai'i County Civil Defense Administrator Darryl Oliveira on SB2535 said "oversight of geothermal permits belongs in the county in which such activity takes place. Placing the permitting authority with county government supports home rule and assures that those people most impacted by any geothermal-related activities have a reasonable opportunity to participate in hearings and voice their concerns...."

The First Amendment of the United States Constitution prohibits laws abridging the right of the people "to petition the Government for a redress of grievances". Despite that provision, special interests have learned that preempting local authority is an easy step toward more profits. In recent years large corporations have increasingly used state and federal laws to remove local regulations they found bothersome. That is why PGV orchestrated the introduction of SB2535. Preemption may appropriately occur in some circumstances to protect the environment, under-represented minorities and other special situations. The use of State power to remove the ability of the County to protect its people and environment is the antithesis of representative democracy and represents the worst of political and economic powerhouses abusing the rights of the local populace. It is a violation of the sacred trust that empowers representative democracy and serves to alienate the populace. State and County government should share respectful roles in passing laws that affect our lives and the future of our islands.

SB2535 SD2 proposes to radically change existing law by preempting county authority in geothermal matters to strengthen PGV's position as an essentially unregulated industrial facility by eliminating Hawai'i County's ability to address toxic monitoring, emergency response, noise and nuisance regulation, sanitation and a wide variety of local concerns that exist today. Those concerns would be shut down by this bill as a plainly disproportionate and unreasonable reaction to PGV-Ormat's financial problems and the weakness of their position in litigation.

County government is more closely connected to and accessible by the people. Local communities are sources of innovation and catalysts for statewide change. The ability of local governments to pass laws that protect the health, safety and welfare of their constituents has been increasingly attacked nationwide in recent years by special interest groups. In those legitimate areas of local concern, counties should be able to build on and improve general State standards, reflecting their communities' unique character and needs. Removing home rule authority in geothermal matters would be a damaging step backwards.

In Gov. Ige's January 25, 2016, address to the Legislature he said:

A few years ago, we saw the demise of the SuperFerry. Its failure has been attributed to environmental objections and a hostile court. But that is not exactly what happened. The fact is the state failed to follow the law. When we tried a legal end run, it also failed. The point is the state should have followed the law and done the right thing in the first place.

SB2535 is a replay of special legislation that attempted to save the SuperFerry – the *legal end run* referred to by Gov. Ige. *Doing the right thing* today requires the defeat of this special benefit legislation aimed at supporting PGV's defense in litigation by eliminating county authority to play its appropriate role in local geothermal issues. PGV's neighbors are aware of the health and safety issues created by their toxic industrial neighbor and need to be able to seek help when needed from their local County government.

The sponsor of SD2535 (acknowledging she was asked to introduce the bill by PGV) contends the state is more qualified to do safety and health issues than the county. However, State regulation of PGV has historically not acted on those types of issues impacting surrounding neighborhoods. For example, the Department of Health is charged with regulating air pollution, including the toxic hydrogen sulfide (H_2S) gas that frequently escapes from PGV's geothermal plumbing (dozens of incidents of toxic H_2S emissions have resulted in civil defense emergencies,

including evacuation orders, affecting neighbors of PGV). To accomplish its duty to regulate air pollution, DOH has a single air sampler in a neighborhood near PGV to test for the presence of H_2S . A single air sampler is not adequate to identify toxic emissions unless the wind delivers the toxic gas directly to that location. How will less local control result in better outcomes when local control is all there is on the ground, in reality? The County's Adler report said (page 10):

Current monitoring systems and protocols are inadequate and must be substantially improved. Because responsibility for the monitoring and reporting of exposures is decentralized across different agencies, an effective communication protocol, especially in the event of an emergency, is also essential. The County of Hawai`i is the layer of government closest to the day-to-day lives of its citizens, and the health and welfare of its citizens must take precedence over geothermal interests.

The State relies on PGV's self-reporting of toxic emissions. The County, in response to the community's concerns about toxic emissions, provided community members portable H_2S monitors and training in their use. In numerous instances trained community members measured elevated H_2S levels while at the same time PGV claimed that there were no leaks. Awareness of toxic emissions is the essential first step of emergency response.

About 7:30 p.m. on Thursday, August 7, 2014, as Tropical Storm Iselle began battering lower Puna, wind blown trees broke the local utility company's electric transmission lines, causing PGV to initiate emergency release of geothermal fluids through the plant's steam relief system (to avoid over-pressure in the plant.) The release dumped noxious gas, primarily toxic hydrogen sulfide, into communities surrounding the geothermal facility. PGV reported its upset condition to Hawai`i County Civil Defense, resulting in officials attempting an emergency response and public notice advising residents to evacuate if they experienced discomfort.

Emergency responders could not reach PGV due to fallen trees and residents were not able to evacuate for the same reason. People said winds sounded strong up in the trees, but the air was relatively still at ground level. Residents trapped in their homes by effects of the tropical storm reported smelling stronger noxious gas odor than they had ever smelled before. Many developed symptoms associated with H2S exposure, some passed out, some could not be awakened for several hours. Respiratory and neurological symptoms lasted for several days. At least one person affected by the exposure passed away the following week. To date, the State has done nothing to follow-up on those injuries. In coming months a Los Angeles toxic tort law firm will be filing suit to prove the harm suffered by inured residents.

DOH is not only unable to monitor toxic emissions from PGV, it is apparently unable to maintain PGV's air pollution permit that expired in 2014. Because a new air pollution permit application was received from PGV before the ending date of the old one, DOH has considered PGV to not be in violation of any laws by operating with an expired permit. Coming up on a period of one and a half years now, DOH seems unable to proceed on the pending application. That is consistent with the community's experience of the State's indifference toward PGV in regulatory matters. DOH seems to prefer letting PGV self-regulate.

In recent years especially, the County – and not the State – has been the most responsive recourse for community members. In addition to passing the night drilling ban and an ordinance that bans geothermal fracking* the County responded to community concerns about health issues by contracting for an independent joint fact finding study (the Adler study).

* Geothermal fracking (also known as enhanced geothermal) is a home rule issue in view of the legislature's past inability to address the question. Most people probably don't know that during more than 40 years of actively looking, the only conventional geothermal resource that has been found is the one PGV taps – the resource PGV appears to be depleting. Hawai'i County's law preventing fracking keeps PGV from tying to restore the resource using that unsafe method. The only active commercial use of geothermal fracking in the United States is by Ormat in Nevada. Fracking cannot be used in Hawaii County to create a new geothermal site, unless the fracking ban is preempted as proposed by SB2535. Dr. Don Thomas of U.H. has found hot rock outside of Puna, but no geothermal resource. This bill telegraphs an intent to use enhanced geothermal to fracture the hot rock in an attempt to get water to flow through it and create a resource. The most optimistic pro-geothermal ambitions anticipate fracking in West Hawai'i, Maui and Waimanalo. Whether it works or not, this legislation and testimony from DLNR in 2014 suggests they want to try it. There are huge problems with that of course, not the least being that they can not even regulate the one conventional geothermal plant they have, yet now they would open the door to an unregulated geothermal fracking industry. That technology induces earthquakes, possibly big ones, pollutes the water, and requires millions of gallons of pumped water to support the simulation of a conventional geothermal resource. You cannot then unfrack once it is done. The economics and technology of fracking are risky - while in public there is a steady denial of any intent to use enhanced geothermal, developers realize that it may be the only method available to create new geothermal production facilities.

The County funded Adler report proposed a community health study. The County has issued a request for proposals for such a study. Also as a result of the study report, the County formed a working group to improve air monitoring. Progress toward genuine toxic pollution monitoring is both essential for emergency response and may help fill a regulatory void left by DOH indifference.

Taking away Hawai`i County's home rule authority in geothermal matters to preempt local ordinances that established the night drilling ban and the geothermal fracking ban would impede access to government response for the communities affected by PGV and set a bad precedent for future special interests wanting to shut down local voices.

We actually do not support political favoritism for PGV. Our proposed alternative of paying PGV money is rhetorical and facetious – but it illustrates the situation. Preemption of County laws is a bad idea in this situation. Instead, we need a reasonable and comprehensive state scheme of regulation *complemented by County laws*.

The high water mark of efforts to restore state geothermal regulation laws repealed in 2012 by Act 97 was reached in 2014 with SB2663, as amended in these committees to remove

mandatory mediation, provide environmental safeguards associated with geothermal resource subzones and address several recommendations of Adler Report. Anything less than that would be regressive – but now Ormat has dropped out of negotiations with HELCO for a new 25 megawatt geothermal plant and there is *no immediate prospect of new geothermal development*.

It is better not to rush forward into new laws in the absence of an actual need. We are not urging you to press forward now with a new state scheme of regulation – instead, our emphasis is on the need for state laws to be *complemented by County laws*. The County is working to respond to recommendations of the Adler report, it is the only progressive activity being made. It is foolish to consider putting a halt to that progress.

For the reasons described above, we strongly oppose SB2535. It cannot be fixed.

Aloha,

nohi

Robert Petricci President



THE HOUSE OF REPRESENTATIVES THE TWENTY-EIGHTH LEGISLATURE **REGULAR SESSION OF 2016** Tuesday, March 22, 2016, 11:00 a.m. **Conference Room 325 State Capitol 415 South Beretania Street** Hearing on SB 2535, SD2

Representative Chris Lee, Chair, Representative Ryan Yamane, Chair; COMMITTEES on ENERGY & ENVIRONMENTAL PROTECTION and WATER & LAND and members of the Committees:

On behalf of Ormat Nevada Inc., we thank you for the opportunity to provide written testimony on SB 2535 SD2. Ormat Nevada Inc. supports the purpose and intent of this bill:

- (1)Clarify that regulation of geothermal resources development and geothermal resources exploration shall be exclusively reserved to the State unless delegated to the counties by statute;
- (2) Require the lessee of a mining lease to comply with all water and air pollution control laws, relating to building, grading, and flood control codes; and
- (3) Require the rules of the board of land and natural resources regarding mining operations, geothermal resource development, and geothermal resource exploration, including drilling conditions and restrictions, to be uniform throughout the State.

Regulatory oversight of all geothermal resources in the State, with regards to exploratory or development of geothermal resources need to be with the agency that has the expertise, understanding, knowledge and human resources to safely regulate all aspects of geothermal drilling operations with the primary focus of protecting and preserving Hawaii's natural resources while ensuring the safety of all those involved in such operation.

SB 2535 (SD2) will bring Hawaii to par with all other leading states in geothermal development, e.g. California, Nevada, Utah, New Mexico, Oregon, New Mexico and Alaska. In all these states, geothermal drilling is regulated exclusively by state agencies that have specific expertise in geology and engineering to be able to ensure safe drilling operation and conservation of the natural resource. Such agencies include the California Department of Oil, Gas and Geothermal Resources: Nevada Department of Minerals, Alaska Oil and Gas Conservation Commission, etc. States like Nevada and California regulate the drilling of tens of geothermal wells per year, many times more than what Hawai'i sees.

ORMAT NEVADA INC.

E-mail: ormat@ormat.com

Page 2 of 2 SB2535 (SD2) March 22, 2016



Geothermal energy has been in safe commercial operation in Hawai'i since 1993. Geothermal energy has been providing up to 25% of all the energy consumed annually on Hawai'i Island. This amount of energy is equivalent to about 150,000 barrels of oil displaced annually.

In 2015, the State of Hawai'i passed a law requiring that Hawai'i reach 100% renewable energy by the year 2045. Geothermal energy has played a substantial role on the energy needs of Hawai'i Island to date and should play a key role in meeting the State's ambitious new target. SB 2535 (SD2) will help facilitate the entire State of Hawaii's ability to safely and economically develop additional geothermal resources throughout the State.

We appreciate the continued support from our State legislators and want to express our gratitude for the opportunity to provide the aforementioned testimony. Mahalo a nui loa.

Respectfully. alifini

Senior Director for Hawai'i Affairs Ormat Nevada Inc.

ORMAT NEVADA INC.

6225 Neil Road • Reno, NV 89511-1136 • Phone : (775) 356-9029 E-mail: ormat@ormat.com

Fax: (775) 356-9039 Web site:www.ormat.com THE HOUSE OF REPRESENTATIVES THE TWENTY-EIGHTH LEGISLATURE REGULAR SESSION OF 2016 Tuesday, March 22, 2016, 11:00 a.m. Conference Room 325 State Capitol 415 South Beretania Street Hearing on SB 2535, SD2 (SSCR2625)

Representative Chris Lee, Chair, Representative Ryan Yamane, Chair; COMMITTEES on ENERGY & ENVIRONMENTAL PROTECTION and WATER & LAND and members of the Committees:

RE: Statement in Support of SB2535 (SD2)

Thank you for the opportunity to provide testimony to the committees on **Energy & Environmental Protection** and **Water & Land** on a legislative initiative that is important to all who live in our State.

The Japanese Chamber of Commerce and Industry of Hawai'i has been incorporated since 1951 and represent 288 members of the business community.

Geothermal energy has been in safe commercial operation in Hawai'i since 1993. Geothermal energy has been providing up to 25% of all the energy consumed annually on Hawai'i Island. The economic boost and decreased reliance on fossil fuels as a result of geothermal energy is in line with County and State goals for using our own indigenous source of renewable energy.

SB 2535 SD2 does not take away from existing county authority except as to areas where DLNR rules relate to mining operations, or geothermal resource development or exploration. Where authority has otherwise been delegated by the State, the counties still have authority to regulate.

In 2015, the State of Hawai'i passed a law requiring that Hawai'i reach 100% renewable energy by the year 2045. Geothermal energy has played a substantial role on the energy needs of Hawai'i Island to date and should play a key role in meeting the State's ambitious new target. SB 2535 (SD2) will help facilitate the entire State of Hawaii's ability to safely and economically develop additional geothermal resources throughout the State.

The Japanese Chamber of Commerce and Industry of Hawai'i therefore supports SB2535 (SD2).

Yours Truly,

Daver H. Nishich

Darren H. Nishioka President Japanese Chamber of Commerce & Industry of Hawai'i



Testimony to the House Committee on Energy & Environmental Protection and Committee on Water & Land Tuesday, March 22, 2016 at 11:00 A.M. Conference Room 325, State Capitol

RE: SENATE BILL 2535 SD 2 RELATING TO GEOTHERMAL

Chairs Lee and Yamane, Vice Chairs Lowen and Cullen, and Members of the Committees:

The Chamber of Commerce Hawaii ("The Chamber") **supports** SB 2535 SD 2, which clarifies that the regulation of geothermal resources development and geothermal resources exploration is reserved to the State unless delegated to the counties by statute. Requires the lessee of a mining lease to comply with all water and air pollution control laws, relating to building, grading, and flood control codes. Requires the rules of the board of land and natural resources regarding mining operations, geothermal resource development, and geothermal resource exploration, including drilling conditions and restrictions, to be uniform throughout the State.

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

The Chamber supports geothermal resources development and exploration, which in turn support growth of business and cheap renewable energy. With geothermal, the regulating power should reside with the state to ensure safe and consistent production and only with the counties when development exists in proximity to residential areas.

Thank you for the opportunity to testify in support of SB 2535 SD 2.

THE HOUSE OF REPRESENTATIVES THE TWENTY-EIGHTH LEGISLATURE REGULAR SESSION OF 2016 Tuesday, March 22, 2016, 11:00 a.m. Conference Room 325 State Capitol 415 South Beretania Street Hearing on SB 2535, SD2 (SSCR2625)

SUPPORT

Representative Chris Lee, Chair, Representative Ryan Yamane, Chair; COMMITTEES on ENERGY & ENVIRONMENTAL PROTECTION and WATER & LAND and members of the Committees:

On behalf of Maui Economic Development Board's statewide program Island Energy Inquiry[™] (IEI) we thank you for this opportunity to provide written testimony on SB 2535 SD2. Our

(1) Clarify that regulation of geothermal resources development and geothermal resources exploration shall be exclusively reserved to the State unless delegated to the counties by statute;

(2) Require the lessee of a mining lease to comply with all water and air pollution control laws, relating to building, grading, and flood control codes; and

(3) Require the rules of the board of land and natural resources regarding mining operations, geothermal resource development, and geothermal resource exploration, including drilling conditions and restrictions, to be uniform throughout the State.

The Island Energy Inquiry professional development workshops for teachers statewide use renewable energy lessons and technologies to help teachers and students educate for energy prosperity in Hawaii. As such, we are very cognizant of the advantages of geothermal as a stable, renewable energy source in Hawaii.

Regulatory oversight of all geothermal resources in the State, with regards to exploratory or development of geothermal resources need to be with the agency that has the expertise, understanding, knowledge and human resources to safely regulate all aspects of geothermal drilling operations with the primary focus of protecting and preserving Hawaii's natural resources while ensuring the safety of all those involved in such operation.

We hope you will give this bill full support in legislature.

Graham R. DeVey

Graham R. DeVey PE, MAT Project Manager WIT Island Energy Inquiry 1305 North Holopono Street, Suite 1 Kihei, Hawaii, 96753 808.270.6804 (office) 808.879.0011 (fax) graham@medb.org

From:	mailinglist@capitol.hawaii.gov
Sent:	Friday, March 18, 2016 7:51 PM
То:	EEPtestimony
Cc:	sylviadolena@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/18/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Sylvia Dolena	Pele Lani Farm LLC	Oppose	No

Comments: We strongly oppose SB2535 SD1 because: (1) SB2535 SD2 would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking Geothermal gained support in Hawai`i because people want to believe it is a clean, safe and renewable alternative energy. However, a September 2013 multi-disciplinary Geothermal Public Health Assessment report (the Adler report) that was funded by the County of Hawai`i acknowledged "risks from geothermal energy production in Lower Puna exist ... fluids inevitably escape to air, water, or at surface level. Harmful effects can only be understood through better monitoring and reliable health data." The report made numerous remedial recommendations.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 10:12 AM
То:	EEPtestimony
Cc:	malamaopuna@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Rene Siracusa	Malama O Puna	Oppose	No

Comments: Malama O Puna, a 501(c)(3)environmental nonprofit, is in strong opposition to this bill. SB2535 purports to maintaining a statewide uniformity concerning geothermal rules. However, only one County has geothermal capability, Hawaii Island. So this legislation is singling out one County - not a good precedent. Furthermore, there is only one active geothermal developer in the State and on Hawaii Island, and that is PGV, the firm that proposed this legislation to Lorraine Inouye. You are considering a bill that will benefit a single private corporation - not an ethical move if you pass it. The State of Hawaii is NOT the best entity to have oversight over geothermal development because of its long history of doing a terrible job of it. State agencies on O'ahu lack the first hand knowledge and experience of PGV's permit violations - cited by the EPA multiple times. The County is in the best position to deal with this, including the frequent emergencies, upset conditions, releases of toxic gasses into the community, land use violations, etc. etc. This is a home rule issue and the State has proven itself many times over as being unwilling or unable to protect the nearby residents from this industry. That is why PGV wants the State in charge - it is their de facto guarantee of freedom to continue to do as they please and continue violating federal, state and county rules. Please be suspicious of this bill and do not support it. Mahalo.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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:	Friday, March 18, 2016 7:55 PM
То:	EEPtestimony
Cc:	ja@malu-aina.org
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/18/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Jim Albertini	Malu 'Aina	Oppose	No

Comments: Aloha Legislators, Our organization is strongly opposed to SB2535 SD2 which preempts county authority in geothermal matters. I speak as a 35 year resident of the Puna District on Hawaii island and the president of our Malu 'Aina organization. I am well aware of the problems involved with geothermal energy development and believe that government works best when power is closest to the people, that is at the county level. We don't need the state telling us in Hawaii county what is best for us with geothermal. State regulation of geothermal has failed to protect the public health and safety and has failed to uphold and respect Native Hawaiian religious beliefs that drilling into the Hawaiian deity Pele is desecration. Don't let the state become a protective fence for Puna Geothermal Venture. Bury this bill. Mahalo. Jim Albertini

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 5:01 PM
То:	EEPtestimony
Cc:	wao-hsl@WeAreOne.cc
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	We Are One, Inc www.WeAreOne.cc - WAO	Oppose	No

Comments: Strongly Oppose SB2535 SD2 because: (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 8:34 AM
То:	EEPtestimony
Cc:	shootistdrc@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Don Carter	Individual	Support	No

Comments: I Support this measure

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 8:20 AM
То:	EEPtestimony
Cc:	hlbpalmer@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Hillary Palmer	Individual	Oppose	No

Comments: Leave control with the counties!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 8:03 AM
То:	EEPtestimony
Cc:	msmcvey@hotmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Michael McVey	Individual	Support	No

Comments: Safety must be the number one consideration when it comes to drilling. A ban on drilling at night would create a significant danger to site personnel and potentially the surrounding community that could result in serious injury or death.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 8:03 AM
То:	EEPtestimony
Cc:	808deb@hawaii.rr.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Debra Cabarloc	Individual	Support	No

Comments: Oversight should be at the State level for geothermal activity for consistent implementation of regulations through out the State of Hawaii. State oversight will also provide qualified individuals that are trained technically in the area of geothermal expertise to ensure the safety of everyone concerned.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 7:37 AM
То:	EEPtestimony
Cc:	rbaguinbin@ormat.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Reynaldo Baguinbin	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 7:34 AM
То:	EEPtestimony
Cc:	hramirez@ormat.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Herman Ramirez	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 7:29 AM
То:	EEPtestimony
Cc:	jlee@ormat.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Jack lee	Individual	Support	No

Comments: I support night time Drilling

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 7:27 AM
То:	EEPtestimony
Cc:	norberto_orellano@yahoo.com.ph
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

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

Comments: I support...

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 7:26 AM
То:	EEPtestimony
Cc:	rygar1332@yahoo.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Ryan Garcia	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 7:09 AM
То:	EEPtestimony
Cc:	ohulei808@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Jessica Waia'u	Individual	Oppose	No

Comments: I strongly oppose SB2535 SD2 because: (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

Thomas Lee Travis

RR 2 Box 3317 Pahoa, Hi 96778 email: <u>ttravis12@mac.com</u> mobile: (757) 639-7364

March 21, 2016

House Committee on Energy & Environmental Protection Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

House Committee on Water & Land

Rep. Ryan I. Yamane, Chair Rep. Ty J.K. Cullen , Vice-Chair

Testimony: SB2535 SD2 (relating to geothermal) – *strongly oppose* (Hearing on

March 22, 2016, at 11:00 a.m.)

Senators,

I strongly oppose SB2535 SD2 because:

- . (1) SB2535 SD2 is intended to *preempt* county authority to enact geothermal laws;
- . (2) it would interfere with *ongoing litigation* in the Third Circuit Court;
 - (3) as such, SB2535 SD2 would confer a *special benefit* upon PGV; and
- . (4) *state regulation* of PGV has been lacking.

I concur with Puna Pono Allicance testimony submitted by Robert Petricci which discusses these issues. My testimony will focus on the States record in regulating geothermal. I will make the following points:

- The County has inherent interest in regulating geothermal, appropriately tailoring the regulatory structure to local conditions.
- The State has not demonstrated that it has the resources or wherewithal to appropriately regulate geothermal, a potential community health hazard.
- State regulation of geothermal has been inadequate to support community health.

The County has inherent interest in regulating geothermal, appropriately tailoring the regulatory structure to local conditions.

First, the County coordinates Civil Defense on the Island of Hawaii. Issues controlled by the County—such as the status of roads, capabilities and priorities of first responders, the ability to provide warning, and the direction of evacuation—are affected by the regulatory structure.

Second, each geothermal plant will be different distances from homes and in areas of different acoustic and meteorological conditions. The County clearly should have authority to ensure the geothermal plant, a major industrial facility, is regulated to ensure the plant fits inside the community in which it was built.

The State has not demonstrated that it has the resources or wherewithal to appropriately regulate geothermal, a community health hazard.

Many homes are at the fence line near the PGV plant. In 2001, the letter to PGV issuing Geothermal Resource Permit-2 refers to the fact that the HDoH noise level of 70dBA during day and night is "unreasonably loud and the Planning Commission believes that nearby residents are justified in seeking a stricter standard. It is also understandable that they did not expect that noise standards would be so drastically relaxed, after the permittee made representations that the noise levels would not exceed 55/45 dBA". Although identified as a regulatory requirement over a decade ago, unacceptable State noise regulations have not yet been revised.

By regulation, PGV can produce noise equivalent to placing a running vacuum cleaner in each of the homes around the clock. I would opine that if I were to bring a portable vacuum cleaner into this chamber, turn it on, and refuse to shut it off I would be arrested. Don't people in their homes deserve the same peace and quiet that you insist on in your chambers. State law does not provide that peace and quiet.

Additionally the number and sampling height of hydrogen sulfide samplers are inadequate:

- · to determine the severity of a PGV upset,
- · to determine need for community warning and evacuation, or
- to have confidence that PGV is being honest and straightforward about when and what has been released.

The three perimeter samplers do not cover the full azimuth of possible release directions. The sample height of 15 feet is too high to detect ground hugging hydrogen sulfide released during maintenance and too low to detect hydrogen sulfide mixed with steam that rises over the samplers and descends into the community as it cools.

Additionally only hydrogen sulfide is sampled although other dangerous pollutants are released during upsets.

State lacks of expertise to understand PGV operation. This lack of understanding is exacerbated by a cozy familiar relationship between PGV and regulatory personnel.

- The DOH relies on PGV to report violations of rules. In one case in April of 2013, PGV denied a release of hydrogen sulfide for many days before it became clear a release had occurred during maintenance Such incompetent and possibly dishonest reporting from PGV personnel was apparently taken in stride by regulators.
- Following the release of unabated geothermal fluid to the community in August of 2014, PGV claimed publicly that the release was abated and the plant operated by design. Neither assertion was true. Before any investigation, senior DOH personnel in Honolulu told the public that there were no health effects from the release.

DOH lack of expertise and cozy relationship with PGV becomes more serious when it is coupled with DOH's poor relationship with the community. Community members are often treated as unreliable observers and troublemakers rather than as participants in the regulatory process. For example, DOH denied community requests for assistance in conducting a survey of health effects following August 7, 2014 release from PGV, When asked why DOH did not effectively monitor for hydrogen sulfide and then enforce PGV violations that resulted in exceeding the State hydrogen sulfide limit, Dr. Rosen, the Director of DOH, stated that she was not sure PGV could operate if they were regulated to that level...she believed such regulation may be excessive and not in the public interest.

In those instances when the State does take action finding PGV at fault, the action is disproportionate. For example, DLNR recently fined someone over fifty thousand dollars for cutting down a few trees on state land. When PGV released gas during Tropical Storm Iselle—causing a dozen people to pass out, probably contributing to the deaths of one ill and one elderly man, and injuring a score of others—DOH fined PGV less than thirty thousand dollars. PGV has apparently appealed the level of fine.

Summary

Senate Bill 2535 SD2 is poorly conceived, would use State government to aid special interests, and would further contribute to making the community surrounding PGV a sacrificial community. I strongly believe that the Community voice should not be muted by law either through preemption or through ill conceived special procedures like mediation in lieu of contested case.

•

Please kill this bill

Thomas Diran

Thomas L Travis

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, March 21, 2016 8:56 AM
То:	EEPtestimony
Cc:	jfhphoto@yahoo.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
jordan hara	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 8:43 AM
То:	EEPtestimony
Cc:	cvancamp3@hawaii.rr.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Carol A. VanCamp	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 9:17 AM
То:	EEPtestimony
Cc:	jennahia@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Noelani Ahia	Individual	Oppose	No

Comments: I oppose this bill. Just like everything in Hawaii that impacts our environment, our health and our sacred places, there should be appropriate regulations for the protection of the `aina and the people, not the corporate interests. Mahalo for your consideration, Jennifer Noelani Ahia

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From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, March 21, 2016 9:24 AM
То:	EEPtestimony
Cc:	steve_hirakami@notes.k12.hi.us
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Steve Hirakami	Individual	Oppose	No

Comments: It would be nice as the bill states to have a Statewide comprehensive system for health and safety. However, in our State, that is not accomplished with a Honolulu centric government. When it comes to Geothermal, the County most involved, Hawaii County, should be able to enact specific measures to ensure the health and safety of its citizens. When Iselle decimated the East end of Hawaii, over a 130 citizens were affected (some severely) by the toxic release of hydrogen sulfide gas while trapped in their homes. The State Health Department, however, came up with a statement to the media that the effects were minimal. It is the most pertinent evidence that the government agency nearest to the area is the best judge of what is safe and healthy for its people.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 11:17 PM
То:	EEPtestimony
Cc:	kama@hawaiiantel.net
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Kama	Individual	Support	No

Comments: Support the purpose and intent of this bill.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 11:09 PM
То:	EEPtestimony
Cc:	justintrip@hotmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Justin Tripp	Individual	Oppose	No

Comments: I Oppose this bill because I request strict regulations for geothermal power in the state of Hawaii. I believe geothermal power should not be explored in the state of Hawaii.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 10:05 PM
То:	EEPtestimony
Cc:	malamapuna@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Paul Kuykendall	Individual	Oppose	No

Comments: My name is Paul Kuykendall and I strongly oppose SB2535 SD2 because: (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking Finally, the bill puts the profits of PGV above the health and safety of those who live near the plant. Please oppose this bill. Thank You.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 8:59 PM
То:	EEPtestimony
Cc:	ellenswenson@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
ellen schomer	Individual	Oppose	No

Comments: I oppose this bill sb2535

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 8:50 PM
То:	EEPtestimony
Cc:	suzannewakelin@yahoo.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Suzanne Wakelin	Individual	Oppose	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 8:26 PM
То:	EEPtestimony
Cc:	333cory@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

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

Comments: Aloha legislators, I wonder why we would give the State more responsibility for geothermal, when the State DOH is having trouble just dealing with mosquitoes. mahalo, Cory Harden, Hilo

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From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, March 21, 2016 9:27 AM
То:	EEPtestimony
Cc:	michaelkaleikini@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Michael Kaleikini	Individual	Support	No

Comments: I support the purpose and intent of SB2535. DLNR is the proper agency to oversee & regulate geothermal resources exploration and development. County of Hawaii continues to have regulatory oversight from the County aspect.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 3:18 PM
То:	EEPtestimony
Cc:	vickiv@hawaii.rr.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Vicki Vierra	Individual	Oppose	No

Comments: I oppose this bill, SB2535, which was created by Senator Inouye expressly to satisfy the needs of a transnational corporation whose owners are from Israel. Puna Geothermal Ventures has a history of not following the rules and shows a deep lack of respect for it's neighbors, having poisoned and sickened them numerous times. It is outrageous that a geothermal plant was placed in a rainforest neighborhood full of people in the first place. The State has done little to protect the residents there, and this bill would only make matters worse. Please oppose this bill.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 1:55 PM
То:	EEPtestimony
Cc:	junglejahnava@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
jahnava baldassarre	Individual	Oppose	No

Comments: I am against SB2535 because it denies decision-making at the local level where impact is felt most acutely. Also, the State has shown inadequacy in regulating PGV. Sincerely and thank you for your time & work on this issue, Jahnava Baldassarre Pahoa 96778

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 20, 2016 1:38 PM
То:	EEPtestimony
Cc:	carolinesdelano@aol.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Delano	Individual	Oppose	No

Comments: I oppose SB 2535, We the people of Hawaii want and deserve a say.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, March 20, 2016 1:36 PM
То:	EEPtestimony
Cc:	shannonkona@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Rudolph	Individual	Oppose	No

Comments: Please OPPOSE SB2535! Any rules dealing with geothermal development need to stay closest to the communities affected! Honolulu doesn't have a CLUE what Hawai'i Island residents have had to suffer for years, at the hands of the the geothermal facility here! How would YOU like it when they take months to drill a new well and it sounds like your whole neighborhood has been moved to the middle of a runway at O'Hare Airport? They insist on drilling ALL NIGHT LONG, for months, even though Hawai'i County passed a bill that says they must stop drilling at night. How absolutely arrogant & uncaring to surrounding neighborhoods! ... Not to mention regularly spewing potentially fatal, poison hydrogen sulfide gas throughout the neighborhoods! Please take five minutes to hear what residents have to suffer at the hands of Puna Geothermal Ventures! VIDEO - Residents Complain of Geothermal Health Impacts Link: https://www.youtube.com/watch?v=FZ6FIzPftZI&list=PLJoDubzII_hurUdIUMYrRpxzZjJ CJOgfx&index=8 On the night of Hurricane Iselle, my best friend and her partner were gassed with hydrogen sulfide from Puna Geothermal Ventures and they both blacked out at their home in Leilani Estates. They were also trapped because of the downed trees and power lines. My friends didn't wake up until 10am the next morning (normally, they're up at six) and had a hard time breathing for the next week. Long story short, my friend's partner went to the doctor at the end of the week because he still couldn't breathe. He died the next day. They tried to say that he had a heart attack.. but some of his friends complained - so they did do an autopsy and now his death is listed as still 'under investigation'. PGV has had a ton of leaks, emergency ventings, blowouts, etc. No decent monitoring system, and no evacuation plan after 30 years. Neighbors get ill every time there's a leak. I have several dear friends in the area and I am extremely concerned about their health. On the monitoring - the health dept. brought a monitor out and installed it 10 feet off of the ground. Hydrogen sulfide is heavy & normally rolls along the ground, downhill. In Act 97, geo-fracking is allowed anywhere in the state, (all they need to find are hot rocks) - except in Hawai'i County due to our fracking ban that has yet to be challenged with preemption by the state. I've read that investors think geothermal is a risky investment & many shy away from it. I'm concerned about tax money supporting this toxic adventure anywhere in Hawai'i - that utilizes this dangerous, dinosaur technology. The people in communities closest to PGV have really

gotten a raw and rotten deal and we don't want to see this fiasco repeated on Hualalai or anywhere else in Hawai`i. Many people around the state know what Puna has suffered and we don't want it to happen here - or there. I Hope you will take a look at some of this video from the community - it's VERY compelling. >VIDEO - Puna Pono Alliance Geothermal Health Impact Meeting Link:

https://www.youtube.com/watch?v=FZ6FIzPftZI&list=PLJoDubzII_hurUdIUMYrRpxzZjJ CJOgfx&index=8 Mahalo.

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As a resident of Kailua-Kona born and raised in the State of Hawaii I STRONGLY OPPOSE SB2535. I request proper regulations and enforcement for Geothermal safety standards and monitoring. I also request Home Rule-what happens on the Big Island should be decided by the people of the Big Island.

Puna Geothermal has a long history of poor regulations and this has made the people of Puna sick for over 30 years, including 2 deaths after the Hurricane Iselle blow out last year. The 1991 Goddard and Goddard Environmental Engineering Studies report (July 22,1991) was done after an UNCONTROLLED venting that went on for 3 days (June 12,13,14, 1991). This study https://evols.library.manoa.hawaii.edu/bitstream/10524/19341/1/2882.pdf has:

- <u>Summary of Findings and Summary of Recommendations</u> (page 1&2)
- <u>Public Health Effects of Air Pollutants from Geothermal Development</u> and a <u>Community</u> <u>Health Impact Assessment (pages 28-28)</u>

Hawaii is a very special place and we all need to protect its beauty and its people. We need to protect the air, land, and water quality with proper laws, regulations, and enforcement. Legislators in the past have passed laws that hurt our islands and environment, now with more environmental awareness and Legislators that care about the people we can make these positive impactful changes that will keep Hawaii beautiful Hawaii.

Thank you in advance for your consideration, and thank you for your legacy helping the environment and people of Hawaii. Malama Pono

Cherie Griffore

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, March 20, 2016 11:52 AM
То:	EEPtestimony
Cc:	reneeinhawaii@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

SB2535

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Renee Robinson	Individual	Oppose	No

Comments: Please oppose SB 2535. There is good evidence that geothermal plants: 1) can cause earthquakes (Hawaii Island has more than enough earthquakes) 2) release toxic chemicals into the air and groundwater (no need to discourage tourists) 3) cause health problems for workers and area residents (keeping people healthy will increase taxes paid into the state funds) 4) are not green or sustainable Questions to Ask: • What does the environmental assessment (EA) of Hualalai show? • What does the health study say about the effects of the toxic chemicals in the air? • Why hasn't there been proper monitoring of PGV's emissions and comprehensive health studies of people who live near the plant in Puna? The existing Puna Geothermal Venture (PGV) well in Puna has a history of 18 civil defense emergencies and one total blowout (from 1991–1999), in which residents were evacuated from their homes. Why is there no data after 1999? . What levels of mercury, arsenic, lead, and boron could be released into the environment, as in the blowout? How do all these toxins interact with each other and with vog? • If geothermal drilling created a "wild well" in California, isn't it possible that an uncappable environmental disaster could be the result here? • How many properties are within a 1-mile radius? 5-miles? 10-miles? How will owners be compensated? • What are the evacuation plans if there is a total blowout? • Isopentane is a highly flammable liquid, with a boiling point of 82F, which can explode if vapors contact air. How will this chemical be transported to the geothermal wells safely? In trucks over our roadways? • Is it true that the small existing well in Puna stores around 60,000 gallons of Isopentan, and "loses" 40 gallons per day? How is it released into the environment? Is it true that the fire in 2003 was caused by an explosion of isopentane from a lightning strike? What would the blast zone of 60,000 gallons of isopentane be? • What happens to the state's power supply in case of a lava flow? • Will geothermal actually raise the cost of living in Hawaii? Would this huge investment be made if consumers weren't ultimately footing the bill? • Is it true that Hawai'i's geothermal resource (drilling 7000+ ft into a live volcano) is far more polluting than California's "clean steam" geothermal, which taps geysers? • Can geothermal cause earthquakes, massive land subsidence, or lifting up of the land here, as it has elsewhere? • When toxic emissions are re-injected, what happens if an earthquake ruptures underground pipes or containment basins? Will this poison groundwater, and hence, the ocean? • What will be the effects on animals,

plants, and sea life, as well as humans? • Does emergency open venting occur automatically? • What about the 24/7 noise pollution from drilling and cooling?

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, March 20, 2016 9:40 AM
То:	EEPtestimony
Cc:	nschomer@msn.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Nadia Ranne	Individual	Oppose	No

Comments: I strongly oppose. Regulation must be at county level. We need home rule! --- I support the position of the Puna Pono Alliance. They are an amazing group of people making the time to work on this and represent our community on these critical issues that have and continue to affect the health and safety of residents and environment now and for future generations.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, March 20, 2016 5:12 AM
То:	EEPtestimony
Cc:	Kekaukike@msn.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Richard DeLeon	Individual	Oppose	No

Comments: To our legislators County council, I opposed this bill due to the facts of Health and safty issues!! We know what happened to the well in Punahou when the earth quake hit and all those has was released and near by residents suffered. Oppose this bill based on safty and health..

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, March 20, 2016 1:00 AM
То:	EEPtestimony
Cc:	Merway@hawaii.rr.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/20/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
marjorie erway	Individual	Oppose	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, March 19, 2016 11:31 PM
То:	EEPtestimony
Cc:	asher8@hawaii.edu
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
D'Anna Asher	Individual	Oppose	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, March 19, 2016 9:30 PM
То:	EEPtestimony
Cc:	shanaritsema@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Shana ritsema	Individual	Oppose	No

Comments: Please do not consider this bill. Many people that live close to the geothermal have been negetivly affected by it and taking the rights away from the county will Only hurt the people more. Not enough Has been done to address the problems associated wth geothermal and it affects the land,air,and people too much to be ignored.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 7:31 PM
То:	EEPtestimony
Cc:	waiala.ahn@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Wai'ala Ahn	Individual	Oppose	No

Comments: Aloha Mai Senators, My name is Wai'ala Ahn, and I'm a long time resident of Lower Puna, Pohoiki area; but was permanently relocated by the county due to geothermal development. I spent my childhood growing up in Lani Puna Gardens, a small neighborhood next to Pu'u Honua Ula and neighbor to PGV (Puna Geothermal Venture). I come as a concerned and educated citizen with the deepest Opposition of Bill2535 asking that it be dissolve/removed. My concern comes from that of a child, who watched their own parent suffer with the fact and fear that their was nothing they could do to protect them against the adverse effects of geothermal. To protect me from the harmful health effects, due to geothermal leaks, from a blow up, with the knowledge that there are people in your community that are sick, that died and that you are and your child are no better off; that those in power aren't listening and you, and your children and your community are dammed. I'm the concerned child helpless to aid their parent, but able to see their fear, a fear no child should have to see in their parents/saviors/super heroes eyes....now as an adult my Kuleana is to prevent this reality, this fear from happen in any other community, for any other parent or any other children. Let my story be a cautionary tale and please do not allow it to happen again. To state that geothermal development is Safe, Monitored or Beneficial to the community/state is the opposite of the truth. For thirty years there has been opposition, proof and causalities due to geothermal activity. From the moment of the 91' blow out there has been miscarriages and stillbirths and adverse medical issues, especially for woman and children. To this day there has been no proper testings/studies or outreach. Still no studies on the long term effects of geo; as one of the closest and long term residents of the area, I have not once been asked to participate in a study, though I have offered publicly multiple times, and have read that the county and health dept have done them, but I haven't know one person who suffers from aliments or has concern that's been apart of them. It's scary to think that the state wants to expand geo production, and start exploratory drilling in new locations like mauna Hualalai in Kona and Maui's mauna Haleakala, when No One really knows the long term effects of the one plant that's already in use and has been grossly miss ran for over thirty years. Please look into the damages done and their long term effects of residents health, water, land, before any further development whatsoever; Puna lives with this genocide,

please don't allow it to spread. To subject communities to an array of childhood illness that range from respiratory issues, auto immune issues, high levels of heavy metals that attribute to learning disabilities, heightened aggression, impaired comprehension, and emotional instability. Bloody sores, skin issues and rashes on body orifices, and mucous membranes. Abscesses, and growths in respiratory areas (chest, throats, mouths). The temporary inability to work, extended flu like systems, loss of appetite, congestion, and labored/struggled breathing, just to name a few. For adults the aliments are very much the same but can be detrimental/ deadly for the elderly, as with the high level un-monitored leaks resulting in deaths during hurricane iselle in 2014. These toxins seem to effect the fragile; like fetuses, elderly or those with compromised health. They are also extremely damaging to woman and their reproductive health, with multiple cases of infertility, high risk pregnancies, ectopic pregnancies, multiple miscarriages, late term miscarriages, tumors, cysts and abnormal reproductive pain/health. Many woman that grew up with in the surrounding area of PGV were not able to conceive or bring babies to term until they lived years outside of the surrounding area. Until these issues and others including cultural and spiritual effects, water and land contamination, evacuation safety, land rights/use, buffer zones, relocation, alternative sources, etc.etc, are discussed with the effected communities and Proper Monitoring, like that recommended in the '91 Goddard & Goddard study recommend called PAMP (Puna Air Monitoring Program) is implemented no bills that don't offer support to effective monitoring should even be considered. So again, Please Strongly Oppose and dissolve Bill2535. Mahalo Nui. Wai'ala Ahn

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 9:33 AM
То:	EEPtestimony
Cc:	john@olsontrust.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
John C. Cross	Individual	Support	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 7:15 PM
То:	EEPtestimony
Cc:	casedavids@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
David S. Case	Individual	Oppose	No

Comments: I strongly oppose SB2535 for all the reasons so clearly laid out the the Puna Pono Alliance testimony, which I have read in full. The best government is that which is closest to the people, which is why the State of Hawai'i should promote rather than disable local government's abiity to regulate health and safety. I respectfully request that your Committees to defer this bill.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 6:41 PM
То:	EEPtestimony
Cc:	lesliewingate7@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Leslie Wingate	Individual	Oppose	No

Comments: (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 5:52 PM
То:	EEPtestimony
Cc:	lynhowe1946@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Lyn Howe	Individual	Oppose	No

Comments: This bill would preempt county authority in geothermal matters, interfere with litigation in process in the Third Circuit court and give PCV a special benefit. We need to regulate PGV to keep the community safe.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 5:32 PM
То:	EEPtestimony
Cc:	bill@puna.us
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Bill Smith	Individual	Oppose	No

Comments: I oppose SB2535 SD2 because: (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 4:35 PM
То:	EEPtestimony
Cc:	nicolilla@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Nicki Conti	Individual	Oppose	No

Comments: I do not support bill SB2535 SD2 as it would preempt county authority in geothermal matters. I believe the residents of hawaii county have made it clear that we do not want night time drilling by creating and passing the night time drilling ban last year. Bill SB2535 SD2 wants to take away our right to home rule and disreagard our efforts to protect oursleves . It is clear that bill SB2535 SD2 is being pushed through by big business and those supporters who stand to gain from further geothermal exploration and disreagrds the health and safety of residents of Hawaii County. PGV claims the night time drilling ban jeopardizes safety, but admits it can drill in compliance with the law. PGV's actual argument against the law is economic. Why must I ask the Hawaii legister , "as a public officals who do you really work for ?" Thank you for your time and consideration.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 3:08 PM
То:	EEPtestimony
Cc:	crazyravysmom@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Dianna Wilcox	Individual	Oppose	No

Comments: We strongly oppose SB2535 SD1 because: (1) SB2535 SD2 would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 1:49 PM
То:	EEPtestimony
Cc:	mendezj@hawaii.edu
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

March 19, 2016

To: House Committee on Energy & Environmental Protection Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair House Committee on Water & Land Rep. Ryan I. Yamane, Chair Rep. Ty J.K. Cullen , Vice-Chair

Re: SB2535 SD2 (relating to geothermal on March 22, 2016, at 11:00am Conference Room 325, State Capitol, 415 South Beretania Street, Honolulu, HI

Dear Representatives:

I strongly oppose this bill being passed as it is not in the best interest of the State of Hawaii because it will set a precedent that is not in the best interest of all of Hawaii for further development. I oppose the bill as written because of the following;

(1) it would preempt county authority in geothermal matters

- (2) it would interfere with ongoing litigation in the Third Circuit Court
- (3) it would confer a special benefit upon PGV
- (4) state regulation of PGV has been lacking

I am in favor of geothermal power as a clean resource but only if there are strong laws and consistent over-sight put into place to ensure that it is approached with the best interest and best management practices. We only have one Hawaii let us not destroy our Aina, Ocean and lose sight of our objective. Way too often our natural resources are exploited and misused for the single minded purpose of making a profit versus providing an alternative source of power that is not petro-chemical based. We need to learn from the mistakes of the past. Please say Nay.

Respectfully,

C. Spellman

Private Citizen (no affiliation)

Maui, HI 96761

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From:	mailinglist@capitol.hawaii.gov
Sent:	Saturday, March 19, 2016 12:06 PM
То:	EEPtestimony
Cc:	deborah@imaginariums.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Deborah Davis	Individual	Oppose	No

Comments: Please do not pas this bill! (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 9:34 AM
То:	EEPtestimony
Cc:	bondma@cs.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Michael Bond	Individual	Oppose	No

Comments: Please defeat this bill. It takes rights away from Hawaiian citizens and gives them to non-democratic processes. My ohana includes hundreds of people on the Big Island, and we do not want to see this disastrous bill passed.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 8:25 AM
То:	EEPtestimony
Cc:	wwmsteiner@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
William W. Steiner	Individual	Oppose	No

Comments: I oppose the taking of geothermal rights from the counties by the state. This would likely create additional costs to the taxpayer in having to set up some kind of oversight committee or group to manage, operate and oversee any developments. This is better left to the counties (think Big Island) where the costs would be more localized and easy to handle without having some state office officials incurring expenses by flying around the state to visit sites, hold meetings with different people, and generally increasing cost for State taxpayers. National reports already show that Hawaii has one of the most bloated bureaucracies in the nation and therefore one of the highest taxing rates to it's citizens. We need to find ways to reduce bureaucracy, not expand it.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 8:05 AM
То:	EEPtestimony
Cc:	katc31999@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Katarina Culina	Individual	Oppose	No

Comments: Aloha, Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2. This bill would preempt County ordinances community has worked so hard to pass. Additionally, this bill would interfere with the community members litigation vs the geothermal plant. People of the Big Island have been suffering from the toxic side effects of geothermal facilities for well over thirty years. Enough is enough. It's time to protect public health and safety first, ahead of a company's profits. Mahalo, Katarina Culina Po box 2142 Pahoa, HI 96778

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 19, 2016 12:00 AM
То:	EEPtestimony
Cc:	barb@kanekiki.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/19/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Barb Cuttance	Individual	Oppose	No

Comments: I write this on behalf of myself and 15 other residents of our community. We strongly appose SB 2335 SD2 because (1) SB2535 SD2 would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking Please do not pass this bill. Barbara Cuttance 14/266 Papaya Farms Road Pahoa Hawai 96778i

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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:	Friday, March 18, 2016 10:53 PM
То:	EEPtestimony
Cc:	keauea@hawaii.rr.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/18/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Ana Kahoopii	Individual	Oppose	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Friday, March 18, 2016 10:47 PM
То:	EEPtestimony
Cc:	panther_dave@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/18/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Dave Kisor	Individual	Oppose	No

Comments: Act 97 notwithstanding, how much more of a choke hold on the local citizenry does PGV really need? It's a given they don't want us to raise any complaints about their questionable operation. Face it, they've harmed a lot of people and only seem to know how to use government against the very ones they are supposed to protect. In any incarnation, SB2535 is just plain wrong! Even their parent Israeli corporation is facing federal fraud charges.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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:	Friday, March 18, 2016 8:14 PM
То:	EEPtestimony
Cc:	333cory@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/18/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

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

Comments: Aloha legislators, Perhaps in theory the State should oversee geothermal. But, in practice, the State has promoted geothermal at the expense of residents' health and safety. Really...ONE lonely air monitor??? Hawai'i County has acted far more responsibly, with a night drilling ban and fracking ban.And they never say "Hang on till we book a flight from Honolulu!" Why does the State want the liability of overseeing geothermal operations? Especially if there are schemes for geothermal fracking that requires vast amounts of water, and may generate earthquakes and pollute drinking water? Speaking of liability, there are now two lawsuits pending against Puna Geothermal Venture. One is for the release of toxic hydrogen sulfide while residents were trapped in their homes by Tropical Storm Iselle, leading to about one hundred reports of health effects. The other is for weeks of noise and vibration from day-andnight drilling. In short, an industrial operation so close to homes is just tragedies and lawsuits waiting to happen. The authorities entrusted with public health and safety should be local as much as possible, familiar with the people and the place. mahalo, Cory Harden, Hilo

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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:	Friday, March 18, 2016 7:56 PM
То:	EEPtestimony
Cc:	tabraham08@gmail.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/18/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

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

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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:	Friday, March 18, 2016 7:16 PM
То:	EEPtestimony
Cc:	danamalina@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/18/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Dana Keawe	Individual	Oppose	No

Comments: I strongly oppose SB2535 SD2. This would preempt county authority in geothermal matters and would interfere with ongoing litigation in the Third Circuit Court. And would also confer a special benefit upon PGV state regulation of PGV has been lacking. Please oppose SB2535 SD2. Mahalo

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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:	Friday, March 18, 2016 7:16 PM
То:	EEPtestimony
Cc:	begoniabarry@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/18/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Barbara Barry	Individual	Oppose	No

Comments: Aloha, Please keep paying attention to the people, not the developers. (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking attention to the people, not the developers. Mahalo,

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From:	mailinglist@capitol.hawaii.gov
Sent:	Friday, March 18, 2016 6:22 PM
То:	EEPtestimony
Cc:	sairam2@hawaiiantel.net
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/18/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Geoffrey Lasr	Individual	Oppose	No

Comments: This bill is trying to gut regulations concerning Geothermal Development. It is the responsibility of the county who lives here to regulate its development. HOME RULE people who are close to the source The regulations are already weak and almost totally non existant The health department allows PGV to basically self regulate You folks over in Honolulu have no idea or you do and do not care about our community This bill is an attempt take away community rights and promote an industry that is totally misrepresented Thank you

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 10:18 AM
То:	EEPtestimony
Cc:	bryanbrey@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Bryan Brey	Individual	Oppose	No

Comments: I strongly opposes SB2535 SD2 because: (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 10:06 AM
То:	EEPtestimony
Cc:	hawaiiheb@yahoo.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

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

Comments: Aloha. The state legislature wants to deny our say on issues that are in OUR backyards. Because of this, I am submitting my OPPOSITION to SB2535. We have worked hard to put in place bills that reflect our needs here on the Big Island. SB2535 will regress our community back to before any of these bills were passed. This is not correct legislation. This is not "government for/by the people". We have spoken...but somehow on the state level we are deemed incompetent to know what works best for our island. Please remember that each island is unique with specific needs. Please make your future decisions about geothermal ventures based on scientific evidence and not the bank accounts of the CEO's & shareholders of the utility companies. Believe in your constituents. Mahalo for your consideration.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 10:06 AM
То:	EEPtestimony
Cc:	katc31999@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Katarina Culina	Individual	Oppose	No

Comments: Aloha Representatives, Please oppose SB2535 Relating to Geothermal. You are now the only hope to the Puna community on the Big Island to stop this bill written by and for the Puna Geothermal Venture (ORMAT Co.) After more than three decades of suffering ill effects of this industry, it is time to right the wrong and protect the health and safety of people living next to the plant. I also completely agree with the testimony of Puna Pono Alliance and the four major points in opposing SB2535 SD2: (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking Mahalo, Katarina Culina Po box 2142 Pahoa, HI 96778

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 10:02 AM
То:	EEPtestimony
Cc:	kumukahi77@gmail.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Dephlia Rackley	Individual	Oppose	No

Comments: Home rule, Keep out Aina abusers!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 11:24 AM
То:	EEPtestimony
Cc:	mizunob001@hawaii.rr.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Barry Mizuno	Individual	Support	No

Comments: This measure places highly technical oversight and responsibility with the proper State agency. DLNR has the expertise and resources necessary to protect residents and keep them safe. Please support SB 2535 (SD2). Thank you.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 10:55 AM
То:	EEPtestimony
Cc:	ruthaloua@gmail.com
Subject:	*Submitted testimony for SB2535 on Mar 22, 2016 11:00AM*

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Ruth Aloua	Individual	Oppose	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 10:47 AM
То:	EEPtestimony
Cc:	takakig002@hawaii.rr.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Gordon Takaki	Individual	Support	No

Comments: I am in support of SB2535. DLNR should oversee the geothermal resources in Hawaii as they have the expertise in this area. The County will still maintain "Home Rule."

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

EEPtestimony

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 10:55 AM Iowen2-Andrea FW: SB2535 SD2

From: Steve Dailey [mailto:steve@daileysuccess.com] Sent: Friday, March 18, 2016 7:06 PM To: Rep. Chris Lee <repclee@capitol.hawaii.gov>; Rep. Nicole Lowen <replowen@capitol.hawaii.gov> Cc: nimo1767@gmail.com; greggor.ilagan@hawaiicounty.gov Subject: SB2535 SD2

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2. I am in complete agreement with testimony previously submitted from Robert Petricci (copied below for your reference)

I live on Hinalo St - directly behind and bordering the Geothermal property. The activities of the plant are beyond troublesome and my personal observation - based on significant involvement to rectify issues that are dramatically and consistently disrupting our quality of life, property values and health - is that there is a significant "shell game" taking place continuously. It is unclear who to direct concerns to. Concerns are deflected or dismissed. County employees are simply "following the letter" vs considering what is in the best interest of the people they are being paid to serve. Persistent efforts to motivate solutions with County Council representatives (Illagan) and PGV representatives have proven ineffective. Community meetings have been a waste of time. To recommend legislation to distance our efforts to be heard and address significant and (literally) life and death issues to people and departments that don't even live here moves our efforts from bad to worse...and frankly impossible.

My testimony stated in more concise terms: it is clear that politically motivated efforts to distance the troubling and Erin Brockovich-worthy issues that is being recommended by entities and persons that clearly have no - zero - none - zilch vested interest or empathy for those that actually live and breathe in this area, those experiencing the very real and disruptive impact of the geothermal plant and activity, is aligned with the same disgusting and outrageous patterns of governance that seems to perpetuate our political system in our country. Might Hawaii be a new and better example of proper, citizen-centric, governance; ...''by the people and FOR the people...''?

I strongly and loudly request that SB2525 SD2 be opposed and defeated.

Please contact me personally for additional insight or clarification as needed: Steve Dailey <u>steve@daileysuccess.com</u> 13-514 Hinalo St Pahoa, HI 96778 512-963-3432

Petricci's and Puno Pona Alliance testimony is as follows - requesting a dedicated vs a dismissive review:

To: House Committee on Energy & Environmental Protection

Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

House Committee on Water & Land

Rep. Ryan I. Yamane, Chair Rep. Ty J.K. Cullen, Vice-Chair

Re: SB2535 SD2 (relating to geothermal) – *strongly oppose* Hearing on ______, 2016, at _____.m., Conference Room _____

Aloha Representatives:

Puna Pono Alliance (PPA) is a community organization concerned with adverse impacts from Puna Geothermal Venture (PGV), the only geothermal site in Hawai'i. We strongly oppose SB2535 SD2 for many reasons, including those stated below. You are considering a bill to save costs for PGV by preempting – *i.e.*, shutting down – a primary source of regulatory activity that affects the company – *i.e.*, the County of Hawai'i. We *strongly oppose* SB2535 SD1 because:

(1) SB2535 SD2 would *preempt* county authority in geothermal matters (2) it would interfere with *ongoing litigation* in the Third Circuit Court (3) it would confer a *special benefit* upon PGV
(4) *state regulation* of PGV has been lacking

Geothermal gained support in Hawai`i because people want to believe it is a clean, safe and renewable alternative energy. However, a September 2013 multi-disciplinary *Geothermal Public Health Assessment* report (the Adler report) that was funded by the County of Hawai`i acknowledged "risks from geothermal energy production in Lower Puna exist ... fluids inevitably escape to air, water, or at surface level. Harmful effects can only be understood through better monitoring and reliable health data." The report made numerous remedial recommendations.

The geothermal industry is supported by powerful public relations and has broad political support, but is not what it is advertised to be – it is *not clean, safe or renewable*. We see locally how it is not renewable. A March 6, 2016, news report said production at PGV, that "contracts with Hawaii Electric Light Co. to provide up to 38 megawatts of renewable energy, averaged only 24.7 megawatts during the state's last fiscal year, according to a report to the Legislature."

1

Mike Kaleikini, senior director of Hawaii affairs for Ormat Technologies, which operates PGV, said the plant is now producing 30 megawatts. "There's still more work to be done overall," he said, when asked how the plant will increase production, and whether more wells will be needed. "We got some plans in the works," Kaleikini added, without providing specifics. "We don't have any firm plans."

The same report says "Ormat is facing a lawsuit in federal court alleging that it defrauded the federal government of \$13.8 million in stimulus funds for [PGV] expansion, which increased its capacity to 38 megawatts. The company denies the claim." \$13.8 million dollars can go a long way to compensate for lost profits ... what condition would PGV be in without the federal boost?

Economics is not a strong suit in the geothermal industry. Ross Beaty, the founder and Chairman of Alterra Power, has commented on his investment in geothermal energy: "in 2008 I started a renew able energy company

focused on geothermal power production.... After a couple of years and investment of about \$150 million ... I became quite disillusioned about the ability of geothermal power to be anything other than a bit player in the world energy equation. Reality triumphed over my idealism.... Theoretically, geothermal energy is everywhere.... But in reality, commercial geothermal electricity production is an extremely tough and risky business."

One of the bidders in HELCO's February 28, 2013, request for proposals (RFP) for a new facility to produce electricity using geothermal energy, Chevron, is reported to now be working towards a \$3 billion divestiture of more than 1300 megawatts of Asian geothermal assets. That fact, combined with the realities described by Mr. Beaty and Mr. Kaleikini, as noted above, can give an accurate picture of the economic frailty of geothermal development.

The best illustration of the problem may be seen in HELCO's RFP. Ormat, the primary owner of PGV, was the only company meeting the final bid requirements. Ormat then entered negotiations with HELCO to provide an additional twenty-five megawatts of electricity at twelve cents per kilowatt-hour. However, in mid-December 2015 Ormat withdrew after determining development of the project *would not be financially viable*.

On June 18, 2014, the Consumer Advocate said about the RFP: "any bids that have been submitted for new geothermal generation on the Island of Hawaii should be able to demonstrate clear cost reduction benefits. Further, given the current renewable energy penetration levels, the prevailing electricity prices on the Island of Hawaii, and no urgent need for new generation, such cost reduction should not be set just below the current avoided cost; it should be significantly lower." That is a sensible view of how new renewable energy projects should be evaluated.

Pumped-storage hydroelectric generation has been proposed on Parker Ranch lands. A number of new clean and renewable energy projects are being advanced. On ly a sentimental optimism supports the notion that geothermal energy is needed. It really is not needed because of economics – and because it is unclean, unsafe and not renewable. A sensible view of how new renewable energy projects should be evaluated exc ludes the geothermal option. That is a

2

fact of modern life in Hawai`i – one that is hard to swallow by long-time geothermal supporters. But in time even they may see the value of less expensive and safer forms of energy production.

PGV's income follows its electricity sales, and those have been in decline as available geothermal energy decreases. PGV's new wells have not been sufficient to maintain the level of production anticipated by its contract with HELCO. Additional costs of drilling in compliance with the law are no doubt a matter of serious concern to those keeping an eye on PGV profits, just as Ormat, principal owner of PGV, felt the pinch of financial non-viability leading it to bail out of contract negotiations for a new Hawai'i geothermal project with HELCO.

In 2012 PGV's drilling of a new geothermal well continually disturbed its neighbors – in extensive testimony Hawai`i County's Council heard about families unable to sleep and children unable to do homework. An outpouring of complaints about noise and vibration led the Council to pass Bill 292. When signed by the Mayor on December 5, 2012, it became Ordinance 12-151, and part of the Hawai`i County Code, with § 14-114, saying "Geothermal resources exploration drilling and geothermal production drilling operations being conducted one mile or less from a residence, shall be restricted to the operating hours of 7:00 a.m. – 7:00 p.m". The law illustrates how local government was responsive to legitimate local concerns.

In 2015 PGV began to drill another new well – ignoring the county ban by continuous drilling– 24 hours a day, seven days a week. That led to pending litigation to enforce the night drilling ban in *Puna Pono Alliance vs. Puna Geothermal Venture*, Third Circuit Civil No. 15-1- 0034. An April 15, 2015, news article titled *Judge rejects request to dismiss PGV lawsuit* said "PGV's attorney, Thomas Yeh, told the judge the ordinance 'is pre-empted by state law and the comprehensive framework that exists" before Hilo Circuit Judge Greg Nakamura denied PGV's motion to dismiss the lawsuit. If PGV had real confidence in its litigation position under existing laws it would not be trying to change those existing laws through SB2535.

PGV likes to claim the law jeopardizes safety, but admits it can drill in compliance with the law. PGV's actual argument against the law is economic. The law was passed because night drilling is seriously disruptive in the community. The conflict is thus between community peace and PGV costs. If you want to politically support PGV's profits why not just vote to pay them for their added costs of non-continuous drilling and leave the existing laws as they are?

The description of this proposed legislation says it clarifies that regulation of geothermal is reserved to the State unless delegated to the counties by statute, suggesting it merely clarifies how the counties are already preempted by state law in geothermal matters – as was argued in by PGV in its unsuccessful court motion – *that is not true*. SB2535 proposes a radical change in Hawai`i law by categorically preempting county authority to act on geothermal matters.

Existing *state law on drilling requires PGV to comply with county law*, as can be seen in § 3 of SB2535 SD2 that would amendment HRS § 182-7 from saying a geothermal company must comply with "rules of the State, and other laws of its political subdivisions" to complying with county laws only in matters of building, grading, and flood control. Like existing HRS §

3

182-7, DLNR rules §13-183-54(b), governing PGV's state geothermal lease, requires PGV to "comply with all of the requirements, laws, rules, and regulations of the United States, the State and the appropriate county pertaining to the use of the premises or conduct of the operation."

Department of Health rules, in HAR §11-46-13, provide that a county "may adopt and provide for the enforcement of ordinances regulating any matter relating to excessive noise" and that "in any case of conflict between the statute or rule and ordinance, the law which affords the most protection to the public shall apply." That is exactly what Hawai`i County did by enacting the night drilling ban that has been ignored by PGV, resulting in the litigation that led to this bill.

Existing state laws and regulations plainly show county authority in geothermal matters is *not preempted* but *is a recognized part of the overall framework of geothermal regulation*. In 2012, Act 97 repealed former state land use laws that regulated geothermal development. That means the narrower DLNR and DOH authorities are the entirety of state geothermal regulation. Neither agency has been responsive to concerns expressed by the community, making Hawai'i County the only viable recourse for the community.

§ 2 of SB2535 proposes amending HRS §46-1.5, titled *General powers and limitation of the counties*, to say "regulation of geothermal resources development and geothermal resources exploration, as those terms are defined in section 182-1, shall be reserved to the State unless delegated to the counties by statute". That is a categorical preemption of county authority in the broadest terms regarding geothermal matters (in fact, it makes superfluous the amendment of HRS § 182-7 proposed by SB2535 § 3 regarding drilling). *It is a radical change of existing law.*

Legislators not representing constituents in the vicinity of PGV probably do not consider how PGV is a large, dangerous, and largely unregulated industrial operation situated within a developed suburban cluster. The County is charged with responding to problems that arise as a consequence of geothermal operations. DOH has shown it is unable and unwilling to provide a competent monitoring system or safeguards in the event of emergency upset conditions. DLNR simply approves a new drilling permit when PGV wants to drill new wells. Those and additional reasons compet the need for county oversight of geothermal operations.

Senate testimony of Hawai`i County Civil Defense Administrator Darryl Oliveira on SB2535 said "oversight of geothermal permits belongs in the county in which such activity takes place. Placing the permitting authority with county government supports home rule and assures that those people most impacted by any geothermal-related activities have a reasonable opportunity to participate in hearings and voice their concerns...."

The First Amendment of the United States Constitution prohibits laws abridging the right of the people "to petition the Government for a redress of grievances". Despite that provision, special interests have learned that preempting local authority is an easy step toward more profits. In recent years large corporations have increasingly used state and federal laws to remove local regulations they found bothersome. That is why PGV orchestrated the introduction of SB2535.

4

Preemption may appropriately occur in some circumstances to protect the environment, under-represented minorities and other special situations. The use of State power to remove the ability of the County to protect its people and environment is the antithesis of representative democracy and represents the worst of political and economic powerhouses abusing the rights of the local populace. It is a violation of the sacred trust that empowers representative democracy and serves to alienate the populace. State and County government should share respectful roles in passing laws that affect our lives and the future of our islands.

SB2535 SD2 proposes to radically change existing law by preemptin g county authority in geothermal matters to strengthen PGV's position as an essentially unregulated industrial facility by eliminating Hawai`i County's ability to address toxic monitoring, emergency response, noise and nuisance regulation, sanitation and a wide variety of local concerns that exist today. Those concerns would be shut down by this bill as a plainly disproportionate and unreasonable reaction to PGV-Ormat's financial problems.

County government is more closely connected to and accessible by the people. Local communities are sources of innovation and catalysts for statewide change. The ability of local governments to pass laws that protect the health, safety and welfare of their constituents has been increasingly attacked nationwide in recent years by special interest groups. In those legitimate areas of local concern, counties should be able to build on and improve general State standards, reflecting their communities' unique character and needs. Removing home rule authority in geothermal matters would be a damaging step backwards.

In Gov. Ige's January 25, 2016, address to the Legislature he said:

A few years ago, we saw the demise of the SuperFerry. Its failure has been attributed to environmental objections and a hostile court. But that is not exactly what happened. The fact is the state failed to follow the law. When we tried a legal end run, it also failed. The point is the state should have followed the law and done the right thing in the first place.

SB2535 is a replay of special legislation that attempted to save the SuperFerry – the *legal end run* referred to by Gov. Ige. *Doing the right thing* today requires the defeat of this special benefit legislation aimed at supporting PGV's defense in litigation by eliminating county authority to play its appropriate role in local geothermal

issues. PGV's neighbors are aware of the health and safety issues created by their toxic industrial neighbor and need to be able to seek help when needed from their local County government.

The sponsor of SD2535 (acknowledging she was asked to introduce the bill by PGV) contends the state is more qualified to do safety and health issues than the county. However, State regulation of PGV has historically not acted on those types of issues impacting surrounding neighborhoods. For example, the Department of Health is charged with regulating air pollution, including the toxic hydrogen sulfide (H $_2$ S) gas that frequently escapes from PGV's geothermal plumbing (dozens of incidents of toxic H $_2$ S emissions have resulted in civil defense emergencies,

5

including evacuation orders, affecting neighbors of PGV). To accomplish its duty to regulate air pollution, DOH has a single air sampler in a neighborhood near PGV to test for the presence of H $_2$ S. A single air sampler is not adequate to identify toxic emissions unless the wind delivers the toxic gas directly to that location. How will less local control result in better outcomes when local control is all there is on the ground, in reality? The County's Adler report said (page 10):

Current monitoring systems and protocols are inadequate and must be substantially improved. Because responsibility for the monitoring and reporting of exposures is decentralized across different agencies, an effective communication protocol, especially in the event of an emergency, is also essential. The County of Hawai`i is the layer of government closest to the day-to-day lives of its citizens, and the health and welfare of its citizens must take precedence over geothermal interests.

The State relies on PGV's self-reporting of toxic emissions. The County, in response to the community's concerns about toxic emissions, provided community members a portable H $_2$ S monitor and training in its use. In numerous instances trained community members measured elevated H $_2$ S levels while at the same time PGV denied there were any leaks. Awareness of toxic emissions is the essential first step of emergency response.

About 7:30 p.m. on Thursday, August 7, 2014, as Tropical Storm Iselle began battering lower Puna, wind blown trees broke the local utility company's electric transmission lines, causing PGV to initiate emergency release of geothermal fluids through the plant's steam relief system (to avoid over-pressure in the plant.) The release dumped noxious gas, primarily toxic hydrogen sulfide, into communities surrounding the geothermal facility. PGV reported its upset condition to Hawai`i County Civil Defense, resulting in officials attempting an emergency response and public notice advising residents to evacuate if they experienced discomfort.

Emergency responders could not reach PGV due to fallen trees and residents were not able to evacuate for the same reason. People said winds sounded strong up in the trees, but the air was relatively still at ground level. Residents trapped in their homes by effects of the tropical storm reported smelling stronger noxious gas odor than they had ever smelled before. Many developed symptoms associated with H2S exposure, some passed out, some could not be awakened for several hours. Respiratory and neurological symptoms lasted for several days. At least one person affected by the exposure passed away the following week. To date, the State has done nothing to follow-up on those injuries. In coming months a Los Angeles toxic tort law firm will be filing suit on behalf of the inured parties.

DOH is not only unable to monitor toxic emissions from PGV, it is apparently unable to maintain PGV's air pollution permit that expired in 2014. Because a new air pollution permit application was received from PGV before the ending date of the old one, DOH has considered PGV to not be in violation of any laws by operating with an expired permit. Coming up on a period of one and a half years now, DOH seems unable to proceed on

the pending application. That is consistent with the community's experience of indifference toward PGV in regulatory matters. DOH seems to prefer letting PGV self-regulate.

6

In recent years especially, the County – and not the State – has been the most responsive recourse for community members. In addition to passing the night drilling ban and an ordinance that bans geothermal fracking,¹ the County responded to community concerns about health issues by contracting for an independent joint fact finding study. The resulting Adler report proposed a community health study. The County has issued requests for proposals for such a study. Also as a result of the study report, the County formed a working group to improve air monitoring. Progress toward genuine toxic pollution monitoring is both essential for emergency response and may help fill a regulatory void left by DOH indifference.

Taking away Hawai`i County's home rule authority in geothermal matters to preempt local ordinances that established the night drilling ban and the geothermal fracking ban would impede access to government response for the communities affected by PGV and set a bad precedent for future special interests wanting to cut off local voices regarding their ambitions.

We do not support political favoritism for PGV. Our proposed alternative of paying PGV money is rhetorical and facetious – but it illustrates the situation. Preemption of County laws is a bad idea in this situation. Instead, we need a reasonable and comprehensive state scheme of regulation *complemented by County laws*.

The high water mark of efforts to restore state geothermal regulation laws repealed in 2012 by Act 97 was reached in 2014 with SB2663, as amended in these committees to remove mandatory mediation, provide environmental safeguards associated with geothermal resource subzones and address several recommendations of Adler Report. Anything less than that would

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Geothermal fracking (also known as enhanced geothermal) is a home rule issue in view of the legislature's past inability to address the question. Most people probably don't know that during more than 40 years of actively looking, the only conventional geothermal resource that has been found is the one PGV taps - the resource PGV appears to be depleting. Hawai'i County's law preventing fracking keeps PGV from tying to restore the resource using that unsafe method. The only active commercial use of geothermal fracking in the United States is by Ormat in Nevada. Fracking cannot be used in Hawaii County to create a new geothermal site, unless the fracking ban is preempted as proposed by SB2535. Dr. Don Thomas of U.H. has found hot rock outside of Puna, but no geothermal resource. This bill telegraphs an intent to use enhanced geothermal to fracture the hot rock in an attempt to get water to flow through it and create a resource. The most optimistic pro-geothermal ambitions anticipate fracking in West Hawai'i, Maui and Waimanalo. Whether it works or not, this legislation and testimony from DLNR in 2014 suggests they want to try it. There are huge problems with that of course, not the least being that they can not even regulate the one conventional geothermal plant they have, yet now they would open the door to an unregulated geothermal fracking ind ustry. That technology induces earthquakes, possibly big ones, pollutes the water, and requires millions of gallons of pumped water to support the simulation of a conventional geothermal resource. You cannot then unfrack once it is done. The economics and technology of fracking are risky – while in public there is a steady denial of any intent to use enhanced geothermal, developers realize that it may be the only method available to create new geothermal production facilities.

7

be regressive – but now Or mat has dropped out of negotiations with HELCO for a new 25 megawatt geothermal plant and there is *no immediate prospect of new geothermal development*.

It is better not to rush forward into new laws in the absence of an actual need. We are not urging you to press forward now with a new state scheme of regulation – instead, our emphasis is on the need for state laws to be *complemented by County laws*. The County is working to respond to recommendations of the Adler report, it is the only progressive activity being made.

It is foolish to consider putting a halt to that progress.

For the reasons described above, we strongly oppose SB2535. It cannot be fixed. Aloha,

Robert Petricci President

EEPtestimony

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 12:27 PM Iowen2-Andrea FW: SB2535 SD2

From: Pamela Parker [mailto:pamelasueparker@yahoo.com] Sent: Monday, March 21, 2016 9:01 AM To: Rep. Chris Lee <repclee@capitol.hawaii.gov> Subject: SB2535 SD2

Aloha Mr. Lee,

I have enjoyed living in Kaloko Mauka for 30 years and in Kona for 40 years. I believe, with regards to Geothermal, not enough research has been done to measure it's impact on the environment.

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2. Yes, I copied and pasted this but I am in total agreement with this..

I strongly opposes SB2535 SD2 because:

- (1) it would preempt county authority in geothermal matters
- (2) it would interfere with ongoing litigation in the Third Circuit Court
- (3) it would confer a special benefit upon PGV
- (4) state regulation of PGV has been lacking

Sincerely and with Aloha, Pamela Parker

EEPtestimony

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 12:24 PM Iowen2-Andrea FW: SB2535 SD2

From: babaku@aol.com [mailto:babaku@aol.com] Sent: Friday, March 18, 2016 8:34 PM To: Rep. Chris Lee <repclee@capitol.hawaii.gov> Subject: SB2535 SD2

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2.

- (1) it would preempt county authority in geothermal matters
- (2) it would interfere with ongoing litigation in the Third Circuit Court
- (3) it would confer a special benefit upon PGV
- (4) state regulation of PGV has been lacking

mahalo,

Doug Fox Honaunau, Hawaii resident of Hawaii since 1965
From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 12:25 PM Iowen2-Andrea FW: SB2535 SD2

From: Beth McCormick [mailto:hawaii.beth@icloud.com] Sent: Saturday, March 19, 2016 10:16 AM To: Rep. Chris Lee <repclee@capitol.hawaii.gov> Subject: SB2535 SD2

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2.

Elizabeth McCormick	DO
Box 2411	PO
	Kail
ua-Kona, HI 96745	

To: House Committee on Energy & Environmental Protection Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

House Committee on Water & Land Rep. Ryan I. Yamane, Chair Rep. Ty J.K. Cullen , Vice-Chair

Re: SB2535 SD2 (relating to geothermal) – strongly oppose

Dear Sirs:

I am the president of the Permaculture Foundation of Hawaii, which owns a permaculture farm on the Red Road in Opihikao, Puna. I have spent the past 15 years developing that farm, learning about growing and utilizing food plants that may prove valuable to our collective future, including the traditional Polynesian canoe plants. This experience has taught me the value of that traditional 'bread basket' area of the island, with its ability to grow abundant food in an environmentally sustainable way. The Puna Geothermal Ventures plant is close enough to that farm to affect it severely in the event of another PGV well blow-out.

As a private citizen, I am deeply concerned about the many civil defense emergencies resulting from releases of toxic gases from the PGV plant, as well as the prospect of pollution from any new geothermal wells, especially those created by geothermal fracking. I have toured the PGV plant in Puna, and tried to learn as much as possible from both sides of this controversy. I have educated myself about the critical energy issues facing us, and understand the need to wean ourselves away from fossil fuels. I have experienced living off-grid, on a

modest photo-voltaic solar system, with all of its limitations, yet I still believe that solar holds great promise.

Because of the recurrent toxic releases plaguing the Hawaii geothermal industry, I feel that it is essential that the governing of geothermal remain in the counties, where our council members can be responsive to resident's direct experiences. The State of Hawaii has a poor record of regulating the PGV plant. It is important that Oahu's greater population and need for energy does not drown out the voices of those whose lives, health and property are directly impacted by PGV.

Geothermal has not lived up to the dream of a 'clean, green' fuel source; quite to the contrary. It has also not lived up to the dream of being economically viable and renewable. PGV has been poorly regulated, and has certainly not been a 'good neighbor' to the residents of Puna. It is unwise to allow PGV to use state and federal laws to preempt local regulations designed to protect the health and safety of local residents. This is a matter of environmental justice.

cerely,

Sin

abeth McCormick

Aloha pumehana, Beth McCormick <u>Hawaii.Beth@icloud.com</u> www.BethMcCormick.com Eliz

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 12:25 PM Iowen2-Andrea FW: SB2535 SD2

From: Lorn Douglas [mailto:lornd@yahoo.com] Sent: Sunday, March 20, 2016 7:37 AM To: Rep. Chris Lee <repclee@capitol.hawaii.gov> Subject: SB2535 SD2

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2.

Aloha Mr. Chairman Lee,

I do not understand why the State feels it necessary to poke into County business. Currently the only geothermal resource being used is here on the Big Island. The only geothermal exploration is on the Big Island. It's a Big Island issue.

There is no question really that PGV has been negligent so many times endangering their neighbors. It's a real problem and carefully documented. I live at least 8 miles away and have experienced the stink of sulfur from their poor drilling engineering. Let us handle the regulation locally.

Another issue is the takeover of HEI and this legislation has an indirect impact on this issue as well. This is certainly not the time to changing the equation.

Mahalo for your consideration of these thoughts.

Lorn Douglas Lower Puna, Big Island

------(o)(o) -----oOO--(_)--OOo Indecision may or may not be my problem!

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 12:25 PM Iowen2-Andrea FW: SB2535 SD2

From: Danny Li [mailto:dlimay7@flex.com] Sent: Sunday, March 20, 2016 8:44 AM To: Rep. Chris Lee <repclee@capitol.hawaii.gov> Subject: SB2535 SD2

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2.

Aloha Rep. Chris,

I write to oppose SB2535. It is mind-boggling that anyone would propose to ban local/county efforts to regulate geo|thermal operations. I live in Keaau, barely a dozen miles from the PGV site that has had several toxic gas emissions that had sickened nearby residents. Please do not let industry lobbyists limit local regulations of such environmentally - averse operations. Mahalo. Peace & Imua,

Danny (Keaau, Hawaii)

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 12:26 PM Iowen2-Andrea FW: SB2535 SD2

-----Original Message-----From: Patrick Shane Dorian [mailto:kalokodrive@hawaiiantel.net] Sent: Sunday, March 20, 2016 2:28 PM To: Rep. Chris Lee <repclee@capitol.hawaii.gov> Subject: SB2535 SD2

My name is Shane Dorian, I am from Kona, and I oppose bill SB2535 SD2.

I oppose the bill for many reasons, one of which is I believe that geothermal should be strictly regulated by the government. Special interests already have too much power to make big decisions on the public's behalf. I have been to many meetings and heard the people who have been sick for years from living too close to the PGV plant in Puna, and from all that I have researched, PGV has a poor record, with little regulation and a history of "uncontrolled releases". I am concerned for all people of Hawaii County, our health and our children's health and future needs to be a top priority. Pursuing wind and solar power is the way to go, in my opinion.

Shane Dorian 808-936-3121

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2.

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 12:26 PM Iowen2-Andrea FW: SB2535 SD2

From: Patty McQuaid [mailto:konamcquaid@gmail.com] Sent: Sunday, March 20, 2016 6:17 PM To: Rep. Chris Lee <repclee@capitol.hawaii.gov> Subject: SB2535 SD2

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2.

I John M. Mcquaid strongly oppose SB2535SD2. It would preempt county authority in geothermal matters. Let the people who it would effect the most, make the decision. Mahalo for your time.

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 12:26 PM Iowen2-Andrea FW: SB2535 Testimony

-----Original Message-----From: Wai'ala Ahn [mailto:waiala.ahn@gmail.com] Sent: Sunday, March 20, 2016 10:58 PM To: Rep. Chris Lee <repclee@capitol.hawaii.gov> Subject: SB2535 Testimony

Aloha Mai Senators,

My name is Wai'ala Ahn, and I'm a long time resident of Lower Puna, Pohoiki area; but was permanently relocated by the county due to geothermal development. I spent my childhood growing up in Lani Puna Gardens, a small neighborhood next to Pu'u Honua Ula and neighbor to PGV (Puna Geothermal Venture). I come as a concerned and educated citizen with the deepest Opposition of Bill2535 asking that it be dissolve/removed. My concern comes from that of a child, who watched their own parent suffer with the fact and fear that their was nothing they could do to protect them against the adverse effects of geothermal. To protect me from the harmful health effects, due to geothermal leaks, from a blow up, with the knowledge that there are people in your community that are sick, that died and that you are and your child are no better off; that those in power aren't listening and you, and your children and your community are dammed. I'm the concerned child helpless to aid their parent, but able to see their fear, a fear no child should have to see in their parents/saviors/super heroes eyes....now as an adult my Kuleana is to prevent this reality, this fear from happen in any other community, for any other parent or any other children. Let my story be a cautionary tale and please do not allow it to happen again. To state that geothermal development is Safe, Monitored or Beneficial to the community/state is the opposite of the truth. For thirty years there has been opposition, proof and causalities due to geothermal activity. From the moment of the 91' blow out there has been miscarriages and stillbirths and adverse medical issues, especially for woman and children. To this day there has been no proper testings/studies or outreach. Still no studies on the long term effects of geo; as one of the closest and long term residents of the area, I have not once been asked to participate in a study, though I have offered publicly multiple times, and have read that the county and health dept have done them, but I haven't know one person who suffers from aliments or has concern that's been apart of them. It's scary to think that the state wants to expand geo production, and start exploratory drilling in new locations like mauna Hualalai in Kona and Maui's mauna Haleakala, when No One really knows the long term effects of the one plant that's already in use and has been grossly miss ran for over thirty years. Please look into the damages done and their long term effects of residents health, water, land, before any further development whatsoever; Puna lives with this genocide, please don't allow it to spread. To subject communities to an array of childhood illness that range from respiratory issues, auto immune issues, high levels of heavy metals that attribute to learning disabilities, heightened aggression, impaired comprehension, and emotional instability. Bloody sores, skin issues and rashes on body orifices, and mucous membranes. Abscesses, and growths in respiratory areas (chest, throats, mouths). The temporary inability to work, extended flu like systems, loss of appetite, congestion, and labored/struggled breathing, just to name a few. For adults the aliments are very much the same but can be detrimental/ deadly for the elderly, as with the high level un-monitored leaks resulting in deaths during hurricane iselle in 2014. These toxins seem to effect the fragile; like fetuses, elderly or those with compromised health. They are also extremely damaging to woman and their reproductive health, with multiple cases of infertility, high risk pregnancies, ectopic pregnancies, multiple miscarriages, late term miscarriages, tumors, cysts and abnormal reproductive pain/health. Many woman that grew up with in the surrounding area of PGV were not able to conceive or bring babies to term until they lived years outside of the surrounding area. Until these issues and others including cultural and spiritual effects, water and land contamination, evacuation safety,

land rights/use, buffer zones, relocation, alternative sources, etc.etc, are discussed with the effected communities and Proper Monitoring, like that recommended in the '91 Goddard & Goddard study recommend called PAMP (Puna Air Monitoring Program) is implemented no bills that don't offer support to effective monitoring should even be considered. So again, Please Strongly Oppose and dissolve Bill2535. Mahalo Nui. Wai'ala Ahn

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 1:46 PM Iowen2-Andrea FW: SB2535 SD2

-----Original Message-----From: Karen Wolfe [mailto:bigislandtita@yahoo.com] Sent: Monday, March 21, 2016 8:29 AM To: Rep. Chris Lee <repclee@capitol.hawaii.gov> Subject: SB2535 SD2

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2.

Sent from my iPhone

Aloha Mai,

My name is Maile Lindsey, and I'm a resident of Moku o Keawe for 12 years, more specifically Kona on Mauna Hualalai.

I come as a concerned and educated citizen with deepest Opposition of Bill sb2535d2 asking that it be dissolved/removed. My concern comes from knowing many Ohana who suffered (through the Puna Geothermal Venture) with the fact and fear that their was nothing they could do to protect them against the adverse effects of geothermal. To protect loved ones from the harmful health effects, due to geothermal leaks, from a blow up, with the knowledge that there are people in their community that are sick, that died and that you are and your child are no better off; that those in power aren't listening and you, and your children and your community are dammed.

To state that geothermal development is Safe, Monitored or Beneficial to the community/state is the opposite of the truth. For thirty years there has been opposition, proof and causalities due to geothermal activity. From the moment of the 91' blow out there has been miscarriages and stillbirths and adverse medical issues, especially for woman and children. To this day there has been no proper testings/studies or outreach. Still no studies on the long term effects of geo; as one of the closest and long term residents of the area, I have not once been asked to participate in a study, though I have offered publicly multiple times, and have read that the county and health dept have done them, but I haven't know one person who suffers from aliments or has concern that's been apart of them.

It's scary to think that the state wants to expand geo production, and start exploratory drilling in new locations like mauna Hualalai in Kona and Maui's mauna Haleakala, when No One really knows the long term effects of the one plant that's already in use and has been grossly miss ran for over thirty years. Please look into the damages done and their long term effects of residents health, water, land, before any further development whatsoever; Puna lives with this genocide, please don't allow it to spread.

To subject communities to an array of childhood illness that range from respiratory issues, auto immune issues, high levels of heavy metals that attribute to learning disabilities, heightened aggression, impaired comprehension, and emotional instability. Bloody sores, skin issues and rashes on body orifices, and mucous membranes. Abscesses, and growths in respiratory areas (chest, throats, mouths). The temporary inability to work, extended flu like systems, loss of appetite, congestion, and labored/struggled breathing, just to name a few.

For adults the aliments are very much the same but can be detrimental/ deadly for the elderly, as with the high level un-monitored leaks resulting in deaths during hurricane iselle in 2014. These toxins seem to effect the fragile; like fetuses, elderly or those with compromised health. They are also extremely damaging to woman and their reproductive health, with multiple cases of infertility, high risk pregnancies, ectopic pregnancies, multiple miscarriages, late term

miscarriages, tumors, cysts and abnormal reproductive pain/health. Many woman that grew up with in the surrounding area of PGV were not able to conceive or bring babies to term until they lived years outside of the surrounding area.

Until these issues and others including cultural and spiritual effects, water and land contamination, evacuation safety, land rights/use, buffer zones, relocation, alternative sources, etc.etc, are discussed with the effected communities and Proper Monitoring, like that recommended in the '91 Goddard & Goddard study recommend called PAMP (Puna Air Monitoring Program) is implemented no bills that don't offer support to effective monitoring should even be considered. So again, Please Strongly Oppose and dissolve SB2535 SD2.

Aloha Mai,

My name is Pi'ikea Loa, and I'm a long time resident of Moku o Keawe , more specifically Kona on Mauna Hualalai.

I come as a concerned and educated citizen with deepest Opposition of Bill2535 SD2 asking that it be dissolved/removed. My concern comes from knowing many Ohana who suffered (through the Puna Geothermal Venture) with the fact and fear that their was nothing they could do to protect them against the adverse effects of geothermal. To protect loved ones from the harmful health effects, due to geothermal leaks, from a blow up, with the knowledge that there are people in their community that are sick, that died and that you are and your child are no better off; that those in power aren't listening and you, and your children and your community are dammed.

To state that geothermal development is Safe, Monitored or Beneficial to the community/state is the opposite of the truth. For thirty years there has been opposition, proof and causalities due to geothermal activity. From the moment of the 91' blow out there has been miscarriages and stillbirths and adverse medical issues, especially for woman and children. To this day there has been no proper testings/studies or outreach. Still no studies on the long term effects of geo; as one of the closest and long term residents of the area, I have not once been asked to participate in a study, though I have offered publicly multiple times, and have read that the county and health dept have done them, but I haven't know one person who suffers from aliments or has concern that's been apart of them.

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miscarriages, tumors, cysts and abnormal reproductive pain/health. Many woman that grew up with in the surrounding area of PGV were not able to conceive or bring babies to term until they lived years outside of the surrounding area.

Until these issues and others including cultural and spiritual effects, water and land contamination, evacuation safety, land rights/use, buffer zones, relocation, alternative sources, etc.etc, are discussed with the effected communities and Proper Monitoring, like that recommended in the '91 Goddard & Goddard study recommend called PAMP (Puna Air Monitoring Program) is implemented no bills that don't offer support to effective monitoring should even be considered. So again, Please Strongly Oppose and dissolve SB2535 SD2.

Mahalo Nui, Pi'ikea Loa Moku O Keawe

From: Sent: To: Subject: Jennifer Wilbur on behalf of Rep. Chris Lee Monday, March 21, 2016 12:25 PM Iowen2-Andrea FW: SB2535 SD2

From: Beth McCormick [mailto:hawaii.beth@icloud.com] Sent: Saturday, March 19, 2016 10:16 AM To: Rep. Chris Lee Subject: SB2535 SD2

Please accept this testimony to the Committees on Energy & Environmental Protection and Water and Land opposing SB2535 SD2.

Elizabeth McCormick PO Box 2411 Kailua-Kona, HI 96745

To: House Committee on Energy & Environmental Protection Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

House Committee on Water & Land Rep. Ryan I. Yamane, Chair Rep. Ty J.K. Cullen , Vice-Chair

Re: SB2535 SD2 (relating to geothermal) - strongly oppose

Dear Sirs:

I am the president of the Permaculture Foundation of Hawaii, which owns a permaculture farm on the Red Road in Opihikao, Puna. I have spent the past 15 years developing that farm, learning about growing and utilizing food plants that may prove valuable to our collective future, including the traditional Polynesian canoe plants. This experience has taught me the value of that traditional 'bread basket' area of the island, with its ability to grow abundant food in an environmentally sustainable way. The Puna Geothermal Ventures plant is close enough to that farm to affect it severely in the event of another PGV well blow-out.

As a private citizen, I am deeply concerned about the many civil defense emergencies resulting from releases of toxic gases from the PGV plant, as well as the prospect of pollution from any new geothermal wells, especially those created by geothermal fracking. I have toured the PGV plant in Puna, and tried to learn as much as possible from both sides of this controversy. I have educated myself about the critical energy issues facing us, and understand the need to wean ourselves away from fossil fuels. I have experienced living off-grid, on a modest photo-voltaic solar system, with all of its limitations, yet I still believe that solar holds great promise. Because of the recurrent toxic releases plaguing the Hawaii geothermal industry, I feel that it is essential that the governing of geothermal remain in the counties, where our council members

can be responsive to resident's direct experiences. The State of Hawaii has a poor record of regulating the PGV plant. It is important that Oahu's greater population and need for energy does not drown out the voices of those whose lives, health and property are directly impacted by PGV.

Geothermal has not lived up to the dream of a 'clean, green' fuel source; quite to the contrary. It has also not lived up to the dream of being economically viable and renewable. PGV has been poorly regulated, and has certainly not been a 'good neighbor' to the residents of Puna. It is unwise to allow PGV to use state and federal laws to preempt local regulations designed to protect the health and safety of local residents. This is a matter of environmental justice.

Sincerely,

Elizabeth McCormick

Aloha pumehana, Beth McCormick <u>Hawaii.Beth@icloud.com</u> www.BethMcCormick.com

I am contacting you to express my strong opposition to SB2535, a special piece of legislation designed to prevent the monitoring and regulation of Puna Geothermal Venture (PGV) by the County of Hawaii. While I support the use of alternative energy, to include the appropriate use of geothermal resources, it is important to understand that producing geothermal energy in a facility like PGV is an industrial process that includes the potential for the release of toxic substances into the environment. The latest of many such releases occurred on the evening of 7 August 2014 as Hurricane Iselle struck Lower Puna, causing widespread damage, closing roads, downing power lines, and disrupting communication. PGV management chose to remain online as the hurricane hit in spite of the danger, and went through a failed emergency shutdown that went terribly wrong. This shutdown failure released large quantities of hydrogen sulfide (H2S) and other toxins into its surrounding community, causing significant health problems for well over a hundred nearby residents and possibly contributing to the deaths of two.

In spite of its history of multiple toxic gas releases, PGV continues to operate virtually unregulated and un-monitored. The Hawaii Department of Health has demonstrated neither the expertise or the will to regulate or monitor PGV, as evidenced by the fact that the Uncovered Source Permit required for regulation of H2S that expired in December 2014 has yet to be renewed. Meanwhile, the County of Hawaii has attempted to deal with PGV through local ordinances that SB2535 is designed to thwart. While the County of Hawaii Civil Defense (CD) is expected to respond when accidental releases occur at PGV, there is no State of Hawaii requirement for PGV to even communicate with CD. SB2535 would further degrade the County of Hawaii's ability to protect the local community and environment.

Geothermal energy development might play a significant role in freeing Hawaii from its fossil fuel dependence, but such development must be done in a socially and environmentally responsible manner. SB2535 is a step in the wrong direction. Legislation is needed to encourage energy producers to engage with local communities to solve problems, not to override community concerns.

Please join other responsible legislators in opposing SB2535. Thank you for your attention to this matter.



From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, March 21, 2016 11:07 PM
То:	EEPtestimony
Cc:	kkahaloa@kona-kohala.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Kirstin Kahaloa	Individual	Support	No

Comments: As we pay the highest energy bills in the U.S., please consider the support of other forms of energy to help individual rate payers. Please support SB2535. Mahalo!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 9:40 PM
То:	EEPtestimony
Cc:	hypnosusan@sbcglobal.net
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Susan Bambara	Individual	Oppose	No

Comments: This bill is wrong and I vehemently oppose it and ask you to oppose it because (1) it would preempt county authority in geothermal matters (2) it would interfere with ongoing litigation in the Third Circuit Court (3) it would confer a special benefit upon PGV (4) state regulation of PGV has been lacking Please DO THE RIGHT THING. I beseech you to stop promoting bills that smack of cronyism. Mahalo for your time.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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, March 21, 2016 5:38 PM
То:	EEPtestimony
Cc:	ronsan2224@aol.com
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM

Submitted on: 3/21/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Ronald S. Fujiyoshi	Individual	Oppose	No

Comments: Thank you for this opportunity to testify although I live in Hilo. I strongly oppose this bill. Why? Because the net result will be more health problems for the people living near a geothermal plant. Isn't it interesting that this bill is clearly biased in favor of the geothermal industry. In not all cases are the people living closest to the industry correct. A good example is Flint, where the local government has not protected the health of the people. However, in this case the people closest to the geothermal plant have brought it to the attention of the public the health hazards of the industry. Listen to them! A study was passed by the Windward Planning Commission of Hawaii County to study the Psyocho-social impacts of geothermal upon native Hawaiians. This is an important study that needs to be done. The public should know the full impacts of geothermal upon the health of the people, especially those living closest to the industry. This bill smells of a end-run around making sure of the health of those impacted by this industry. Do not pass this bill. Mahalo for the opportunity to share my views! I am sure I reflect the views of those who want true justice.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.





P.O. Box 37158, Honolulu, Hawai`i 96837-0158 Phone: 927-0709 <u>henry.lifeoftheland@gmail.com</u>

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Rep. Chris Lee, Chair Rep. Nicole E. Lowen, Vice Chair

COMMITTEE ON WATER & LAND Rep. Ryan I. Yamane, Chair Rep. Ty J.K. Cullen, Vice Chair

DATE: Tuesday, March 22, 2016 TIME: 11:00am PLACE: Conference Room 325

Re: SB 2535 SD2 Geothermal

PLEASE HOLD

Aloha Chair Lee and Yamane, Vice Chairs Lowen and Cullen, and Members of the Committees

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 46 years. 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 are two bills dealing with county regulation of renewable energy projects on the Big Island.

<u>HB 2636, HD2</u> would require a developer of multiple small solar facilities in the Ocean View agricultural district to get a county special permit.

<u>SB 2535 SD2</u> takes away the counties ability to regulate health impacts associated with the Puna geothermal facility under the pretense of establishing a single state standard for a single facility.

Life of the Land favors consistency, the precautionary principle, the protection of health, home rule, etc.

Thank you for passing HB 2636 HD2.

Please be consistent. Please hold SB 2535 SD2.

Henry Curtis Executive Director William P. Kenoi Mayor

Randall M. Kurohara Managing Director



County of Hawaii CIVIL DEFENSE AGENCY 920 Ululani Street • Hilo, Hawai'i 96720-3958 (808) 935-0031 • Fax (808) 935-6460

Darryl J. Oliveira Civil Defense Administrator



March 21, 2016

Chris Lee, Chair Committee on Energy and Environmental Protection Hawaii State Capitol, Rm 425 415 S. Beretania Street Honolulu, HI 96813

Ryan I. Yamane, Chair Committee on Water and Land Hawaii State Capitol, Rm 425 415 S. Beretania Street Honolulu, HI 96813

Dear Representatives Lee and Yamane,

Mahalo for this opportunity to submit comment for the SB 2535 hearing on Tuesday March 22, 2016 at 11:00 a.m., which clarifies that the regulation of geothermal resources development and geothermal resources exploration is reserved to the State unless delegated to the counties by statute.

The county believes oversight of geothermal permits belongs in the county in which such activity takes place. Placing the permitting authority with county government supports home rule and assures that those people most impacted by any geothermal-related activities have a reasonable opportunity to participate in hearings and voice their concerns or support for such projects.

Mahalo for your consideration,

Darryl Oliveira Administrator Hawai'i County Civil Defense Agency



From:	mailinglist@capitol.hawaii.gov	•
Sent:	Tuesday, March 22, 2016 10:55 AM	
То:	EEPtestimony	
Cc:	donald.m.thomas@gmail.com	
Subject:	Submitted testimony for SB2535 on Mar 22, 2016 11:00AM	

Submitted on: 3/22/2016 Testimony for EEP/WAL on Mar 22, 2016 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Donald Thomas	Individual	Support	No

Comments: I strongly support SB2535. Geothermal energy is the only near term, proven source of base load power that Hawaii has access to. In the past, the county has shown either ignorance of technical issues associated with their attempt to regulate aspects of geothermal development or complete disregard to the safety and well-being of the community at large. Unless the Counties can demonstrate adequate technical competence and responsibility to incorporate technical and scientific understanding of a technology or industry, they should not have the authority to do so.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.