

JOSH GREEN, M.D.
GOVERNOR
STATE OF HAWAII
*Ke Kia'āina o ka Moku'āina 'o
Hawaii*

SYLVIA J. LUKE
LT. GOVERNOR
STATE OF HAWAII
*Ka Hope Kia'āina o ka Moku'āina
'o Hawaii*



KALI WATSON
CHAIRMAN, HHC
Ka Luna Ho'okele

KATIE L. DUCATT
DEPUTY TO THE CHAIRMAN
Ka Hope Luna Ho'okele

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
Ka 'Oihana 'Āina Ho'opulapula Hawaii'i

P. O. BOX 1879
HONOLULU, HAWAII 96805

TESTIMONY OF KALI WATSON, CHAIRMAN
HAWAIIAN HOMES COMMISSION
BEFORE THE SENATE COMMITTEE ON HAWAIIAN AFFAIRS AND
THE SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND
TOURISM
HEARING ON FEBRUARY 8, 2024 AT 1:00PM IN CR 224

SB 2650, RELATING TO GEOTHERMAL RESOURCES

February 8, 2024

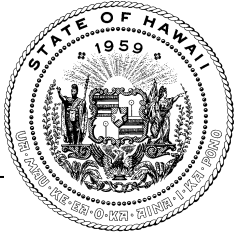
Aloha Chairs Shimabukuro and DeCoite, Vice Chairs Fevella and Wakai, and Members of the Committees:

The Department of Hawaiian Home Lands (DHHL) strongly supports this bill which would 1) appropriate moneys for the continued exploration and identification of geothermal resources on Hawaiian Home Lands and 2) declares that the appropriation exceeds the state general fund expenditure ceiling for 2024-2025.

This bill could allow for the DHHL to generate, transmit, or produce electricity and renewable energy resources on Hawaiian Home Lands. The appropriation request is follow-up to the initial legislation of Act 205, Session Laws of Hawaii 2022. The appropriated funds would be used to complete magnetotelluric surveys and for the drilling of slim holes at previously examined sites.

The Hawaiian Homes Commission (HHC) requested that a permitted interaction group (PIG) be established to study, evaluate, and recommend strategies related to geothermal exploration, feasibility, extraction, and/or use on Hawaiian Home Lands. The most recent PIG report to the HHC can be accessed here: <https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:924dd30c-0485-3b73-9654-e4a298f5db72>. The PIG is scheduled to have its tenth meeting on February 14, 2024.

Thank you for your consideration of our testimony.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone:
Web:

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

(808) 451-6648
energy.hawaii.gov

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
**SENATE COMMITTEES ON HAWAIIAN AFFAIRS
AND
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

Thursday, February 8, 2024
1:00 PM
State Capitol, Conference Room 224 and Videoconference

In Support of
SB 2650

RELATING TO GEOTHERMAL RESOURCES.

Chairs Shimabukuro and DeCoite, Vice Chairs Fevella and Wakai, and Members of the Committee, the Hawai'i State Energy Office (HSEO) supports SB 2650 which appropriates moneys for the continued exploration and identification of geothermal resources on Hawaiian Home Lands (DHHL).

HSEO advocates the role of geothermal energy as a firm renewable resource in playing a significant role in achieving 100% renewable energy generation statewide and supports incentives for its development. HSEO supports funding to explore for geothermal resource potential on DHHL lands that could ultimately result in royalties to native Hawaiian beneficiaries. The identification and verification of potential geothermal resources for electrical power generation through slim hole resource characterization with State support is a necessary step to attract private capital and qualified, reputable developers for potential geothermal development. Otherwise, there is too great a risk of failure for developers to engage in full-scale geothermal production efforts devoid of geological evidence. Data and knowledge gained from exploration can also greatly inform the on-site potential of groundwater resources and carbon sequestration.

HSEO defers to the appropriate agencies for comment on the fiscal, administrative, and regulatory impacts of this bill.

Thank you for the opportunity to testify.



**TESTIMONY BEFORE THE SENATE COMMITTEES ON
HAWAIIAN AFFAIRS
AND
ENERGY, ECONOMIC DEVELOPMENT & TOURISM**

SB 2650

Relating to Geothermal Resources

Thursday, February 8, 2024
1:00 p.m., Agenda Item #1
State Capitol, Conference Room 224 & Video Conference

Greg Shimokawa
Director, Renewable Acquisition
Hawaiian Electric

Dear Chair Shimabukuro and Chair DeCoite, Vice Chair Fevella and Vice Chair Wakai,
and Members of the Committees,

My name is Greg Shimokawa and I am testifying on behalf of Hawaiian Electric in **support** of SB 2650, Relating to Geothermal Resources, which seeks to appropriate moneys for the continued exploration and identification of geothermal resources on Hawaiian home lands.

Hawaiian Electric supports continued exploration and identification of geothermal resources as a means to help accelerate the development of renewable energy projects, support the State's Renewable Portfolio Standards ("RPS") requirements, reduce reliance on imported fossil fuels, stabilize and reduce volatility of customers' bills, reduce greenhouse gas emissions, and assist with post-pandemic economic recovery.

Hawaiian Electric defers to policy makers and those impacted on the appropriateness of funding allocations stipulated in the bill, yet generally supports the intent of exploring and identifying the State's geothermal resources and renewable energy potential.

Thank you for this opportunity to testify in support on SB 2650.



February 7, 2024

SUPPORT FOR SB2650 – RELATING TO GEOTHERMAL RESOURCES

Aloha Chairs Shimabukuro and DeCoite, Vice Chairs Fevella and Wakai, and members of the Committees,
Sustainable Energy Hawai'i (SEH) supports SB2650.

SB2650 appropriates moneys for the continued exploration and identification of geothermal resources on Hawaiian Home Lands and declares that the appropriation exceeds the state general fund expenditure ceiling for 2024-2025.

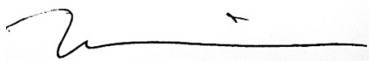
Hawai'i has valuable access to geothermal energy resources. This resource is available across several islands and has the potential to contribute to the State's energy independence and economic resilience and enable social equity. SB2650 will help fund efforts to help us properly utilize our geothermal energy resource on Hawaiian Home Lands.

We have geothermal energy resources to sustain our people and support our industry. Our geothermal energy resource is powered by a geologic hot spot that can provide us with energy – electricity and fuels – for generations. Importantly, energy generation on Hawaiian Home Lands has the potential to empower native Hawaiians further.

We also have local experts, including the researchers at our Hawai'i Groundwater and Geothermal Resources Center, who have conducted preliminary studies on our geothermal and groundwater resources. The findings are promising but more research and exploration are required to determine the viability of geothermal on Hawaii Home Lands.

We have the energy resources and the local expertise to discover and harness them. Funding geothermal research will enable exploration that can ultimately enable a sustainable energy future for Hawai'i. Please support SB2650.

Thank you for the opportunity to testify,



Noel Morin
Chair, Board of Directors
Sustainable Energy Hawai'i
noel@sustainableenergyhawaii.org

Sustainable Energy Hawai'i is a 501(c)3 non-profit dedicated to improving the quality of life for Hawai'i residents. Our mission is to enable an economic, social, and environmental revival in Hawai'i through a just transition to sustainable, locally sourced renewable energy and, to that end, the creation of a thriving clean hydrogen economy.



Email: communications@ulupono.com

SENATE COMMITTEES ON HAWAIIAN AFFAIRS AND ENERGY, ECONOMIC DEVELOPMENT, & TOURISM
Thursday, February 8, 2024 — 1:00 p.m.

Ulupono Initiative supports SB 2650, Relating to Geothermal Resources.

Dear Chair Shimabukuro, Chair DeCoite, and Members of the Committees:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food, renewable energy and clean transportation choices, and better management of freshwater resources.

Ulupono supports SB 2650, which appropriates moneys for the continued exploration and identification of geothermal resources on Hawaiian Home Lands.

Hawai'i needs all viable forms of renewable energy to meet the 100% renewable portfolio standard by 2045. Furthermore, the Hawai'i State Energy Office in its recently published Hawai'i Pathways to Decarbonization Report identifies, among other things, the significant need for additional renewable energy generation to meet broader economy-wide decarbonization goals.¹ Wind and solar alone are not enough. Firm sources, such as geothermal, will also be necessary. Hawai'i also faces many competing demands for available land, and geothermal projects use the least amount of land per megawatt of renewable power produced. As reported by Hawai'i Public Radio in 2019, “[r]esearch recently presented by graduate student Ted Brennis with the [Hawai'i Groundwater and Geothermal Resources Center](#) indicates that where resources are available, geothermal is competitive with wind and solar on both cost and land use.”²

Most residents seem to believe the Big Island is the only place in which geothermal energy can be commercially produced, and yet that assumption has never been thoroughly researched and confirmed. Ulupono supports the work to further the discovery and development of geothermal resources.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

¹ Hawai'i Pathways to Decarbonization Act 238, Session Laws of Hawai'i 2022, Report to the 2024 Hawai'i State Legislature December 2023. <https://energy.hawaii.gov/wp-content/uploads/2024/01/Act-238-HSEO-Decarbonization-Report.pdf>

² <https://www.hawaiipublicradio.org/local-news/2019-07-25/unexplored-geothermal-potential-may-offer-solution-to-renewables-reliability-problem>. Report cited can be found at <https://www.higp.hawaii.edu/hggrc/wp-content/uploads/2019/07/Brennis-Ted-2019.07.23-Thesis-Presentation.pdf>

SB-2650

Submitted on: 2/7/2024 6:11:06 PM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
clara loprinzi	Testifying for Na Iwi Kupuna	Oppose	Written Testimony Only

Comments:

aloha kakou

o' clare kou inoa...noha honokohauiki, i am a indigenous practitioner of 51 years of hanau, helping pe and mama as they go through this ceremony of birth. i have direct interaction of the health affects and inability of young girls and women in the reproduction rights/rites. The high miscarriage rates, the inability to breastfeed due to fetal and mother anomalies from the exposure to geothermal. Your laws need to be abided by, that is your kuleana.

"Act 50 Bill relating to the EIS Environmental Impact Statements Approved April 26, 2000

Moreover, the past failure to require native Hawaiian cultural impact assessments has resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian culture. The legislature further finds that due consideration of the effects of human activities on Native Hawaiian culture and the exercise thereof is necessary to ensure the continued existence, development, and exercise of native Hawaiian culture.

The purpose of this Act is to:(1) Require that environmental impact statements include the disclosure of the effects of a proposed action on the cultural practices of the community and State; and (2) Amend the definition of "significant effect" to include adverse effects.

SECTION 2. Section 343-2, Hawaii Revised Statutes, is amended by amending the definitions of "environmental impact statement" or "statement" and "Significant effect", to read as follows:

"Environmental impact statement" or "statement" means an informational document prepared in compliance with the rules adopted under section 343-6 and which discloses the environmental effects of a proposed action, effects of a proposed action on the economic [and] welfare, social welfare, and cultural practices of the community and State, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects."

Breastfeeding is essential to the survival and health of babies for life. Taking away that right for Hawaiians and all women is unexceptable. The environmental effect and adverse effects is what geothermal is all about in regard to the human body of both moms and baby. The mere act of

"raping" Pele by drilling into her, the pollution of the water for both Pele and the pregnant mom, the young girl who will store it in her body and pass it down in her lineage and the total disrespect to Pele and her lineage in not acceptable.

Article XII Section 7 states "

"The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such.

“Native Hawaiian Rights” means those rights defined in and protected under HRS 1-1, HRS 7-1, HRS 174C-101, Article XII, Section 7 of the Hawai‘i State Constitution, and in rulings of Hawai‘i case law.”

I have worked with families that have been exposed to geothermal and have severe effects from this. It is unacceptable to violate reproductive rights of your people. That is sad and even sadder that one does not respect Pele and the Hawaiian peoples. This bill is disrespectful and solely for the rich to get richer money wise and corporate greed. It is past time for this corruption to be stopped, how many times are bills like this going to come back again and again with a few years in between? We will not stop because it is our kuleana to respect and protect papahonua.

Instead of exploration, please do your due diligence and instead of to "explore and appropriates moneys for the continued exploration and identification of geothermal resources on Hawaiian Home Lands. Declares that the appropriation exceeds the state general fund expenditure ceiling for 2024-2025." Switch it up, Study the health effects of Hawaiian na Ohana, connect to your Hawaiian roots or your genealogy and to the respect that Pele requires and deserves. Thinking one could explore on Mauna a Wakea for geothermal on Mana Rd. is unbelievable.

Keoluolu do not pass on the bill, we need to rebuild papahonua, need to reduce consumption and have the right to our customary cultural and traditional practices.

Me ka haahaa, clare loprinzi Traditional Midwife, Indigenous Practitioner


SB-2650

Submitted on: 2/4/2024 11:35:45 PM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
De Mont Kalai Manaole	Testifying for Hoomana Pono, LLC	Support	In Person

Comments:

We **STRONGLY SUPPORT** this bill.  % of the Royalties from any geothermo business on our Homelands will help to bring in income for DHHL to use for developing Hawaiian Home Lands.

SB-2650

Submitted on: 2/3/2024 9:14:13 AM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Keith Neal	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Shimabukuro and DeCoite and members of HWN/EET

I strongly support SB2650

Hawaii must develop it's abundant, ubiquitous geothermal energy resource that is available on every island. Geothermal energy is always available around the clock, around the year, and just below our feet.

The oil market shocks of the Ukraine invasion is a warning that Hawaii must become energy sovereign and resilient. While continuing to add wind and solar generation, Hawaii must urgently develop geothermal energy resources. Current blackouts exemplify the need to develop 24 X 7 X 365 local geothermal energy.

Should Hawaii agencies or universities are unable to respond urgently to subsurface geothermal development please seeks out the expertise of the following:

**Eavor Inc.
475 Washington Blvd
Marina del Ray, CA 90292
1 (650) 690-8759
info@eavor.com**

Thank you for your consideration,

Keith Neal

Waimea

SB-2650

Submitted on: 2/2/2024 2:59:51 PM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Lu Ann Mahiki Lankford-Faborito	Individual	Support	Written Testimony Only

Comments:

support effort kokua dhhl researching any geothermal resource

SB-2650

Submitted on: 2/4/2024 8:43:30 PM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Tamara Paltin	Individual	Oppose	Written Testimony Only

Comments:

Oppose SB2650

February 4, 2024

Testimony for SB 2650 Relating Department of Hawaiian Home Lands(DHHL)

He Mele komo a he mele aloha no na kupuna o ke au i hala Aloha mai kakou.

Aloha,

My name is Cindy Freitas and I'm a Native Hawaiian descended of the native inhabitants of Hawai'i prior to 1778 and born and raised in Hawai'i.

I am also a practitioner who still practice the cultural traditional customary practices that was instill in me by my grandparents at a young age from mauka (MOUNTAIN TO SEA) to makai in many areas.

I'm in OPPOSITION to SB 2650 for the following reasons;

The DHHL in the sum of \$500,000. for geothermal energy exploration in Hawaii and community outreach activities in affected areas and shall include both surface and subsurface exploration is unacceptable.

The DHHL should be using that \$500,000. giving out the free technology solar power to the people of low or medium income who qualify.

Most of the time when there is an exploration done on any Hawaiian Island there is significant per-historic and Historic History that has to do with the Hawaiian Culture.

There is nothing in the verbiage that PROTECT our per-historic and historic sights.

Therefore this SB 2650 should change to PROTECT our Cultural Traditional Practices. See Act 50 and Article 12 section 7.

Mahalo,

_____/s/_____
Cindy Freitas

Statement of
Brigadier General Stanley J. Osserman Jr. (USAF Ret.), President
Tigershark, LLC
Before the
Senate Committee on Hawaiian Affairs
and
Senate Committee on Energy, Economic Development and Tourism
8 February 2024
1:00 pm
State Capitol Conference Room #224
In consideration of
SB2650
Relating to Renewable Energy

Chair Shimabukuro

4 February 2024

Vice Chair Fevella and Distinguished Committee Members:

Chair DeCoite

Vice Chair Wakai and Distinguished Committee Members:

I stand in strong support of this bill.

As the former director of the Hawaii Center for Advanced Transportation Technologies (HCATT; 2013 to 2019), Hawaii Department of Business, Economic Development and Tourism (DBEDT), I continue to serve our state by promoting clean, renewable energy solutions. This testimony is NOT being given for compensation of any kind by any corporate or commercial entity. I am presenting to you today as a concerned “Life-Long” citizen of the State of Hawaii with extensive professional experience in energy systems, retail and wholesale business, military matters, international commerce, aviation, construction, maritime operations, and public safety, among others. My goal is to help our government leaders make good strategic choices.

While I worked at HCATT, developing a microgrid for the Hawaii Air National Guard as an example of a clean/sustainable microgrid for the U.S. Air Force, I learned a great deal about grid and microgrid operations. One thing that became very clear to me in 2015 was that if Hawaii wanted to support a transition away from fossil fuels using large scale solar-PV and wind power! But my experience and research led me to the conclusion that they could not make up the majority of HECO’s generation! PV and wind are “intermittent” sources of power and when you try to replace the existing HECO grid, exceeding 30% of the generation using intermittent sources was too destabilizing (frequency and power supply/demand balancing). PV and small-scale wind will be ideal for isolated communities that are suited for micro-grid or nano-grid power generation (Distributed generation). But when you add the electric power needs of the future (Electric transportation and data centers and other demands) Hawaii will need around

70% “firm”, “baseload” power that we currently get from the large powerplants operated by HECO at Kahe Point.

The solution boils down to two choices if our citizens plan to maintain their current lifestyle (i.e. using cars and trucks instead of bicycles and horses): Small Modular (nuclear) Reactors (SMRs) or geothermal. Both have been historically frowned upon in Hawaii, but new technology makes geothermal an attractive alternative that is available on virtually all our islands. The details are a bigger topic than I can get into here but suffice it to say that we do not need to (in fact it is not desirable to) do geothermal directly over magma chambers (like the Puna Geothermal Ventures project, that started as a pilot project and met a lot of hostile resistance). Geothermal today has a long safety record and has a better long-term return on investment (ROI) than commercial solar, wind and even SMRs. The Western Governors Association has some great information on their website, and I have done several videos posted on Rumble (under Ossum44) if you want to learn more about the history and advancements in geothermal power.

Professor Nichole Lautze (University of Hawaii, Manoa) has been actively researching what Hawaii’s best options are and she is focused on helping Hawaii do geothermal “right”! That includes making sure that cultural concerns are addressed. We should be doing geothermal in a “Pono” manner, or not at all, and everyone I talk to agrees we should do it right, for everyone, particularly the underserved communities. I think when all the facts are in and the benefits and environmental issues are addressed, we will agree that geothermal is a good choice to make Hawaii clean energy independent.

Hawaii cannot afford to waste any more time figuring out how to meet our clean energy and sustainability goals. SB2650 will facilitate and accelerate finding the right solution!

Brigadier General, Stanley J. Osserman Jr. (USAF Ret.)

President, Tigershark, LLC

SB-2650

Submitted on: 2/5/2024 9:23:28 AM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Kevin Kelly	Individual	Support	Written Testimony Only

Comments:

Dear Chairs Shimabukuro and DeCoit, Vice-chairs Fevella and Wakai, and members of the committees,

The unique geologic setting of Hawaii provides an opportunity to utilize an inexpensive, renewable, carbon-free, natural energy source. There is no reason why geothermal energy, using closed loop technology, should not power the entire Big Island and much of the rest of the state, except for the political will to make it happen.

Please vote to pass SB-2650 as an important first step to making this reality come true

Thank you for the opportunity to testify on this bill.

Kevin Kelly

SB-2650

Submitted on: 2/6/2024 4:38:52 PM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Dylan P. Armstrong	Individual	Support	Written Testimony Only

Comments:

Hawai'i needs to get serious about renewable energy before it's too late. Geothermal certainly qualifies. If this measure can empower the DHHL in pursuing its mission goals I would hope even more for SB 2650's success.

SB-2650

Submitted on: 2/7/2024 9:40:34 AM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Makai Freitas	Individual	Support	Written Testimony Only

Comments:

I strongly support this bill. Mahalo

SB-2650

Submitted on: 2/7/2024 12:05:51 PM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Alice Kim	Individual	Support	Written Testimony Only

Comments:

Geothermal energy production on the Hawaiian home lands can benefit the people of Hawaii including Native Hawaiians because geothermal energy can offer the following:

- Lower the cost of electricity
- Greatly reduce carbon emissions involved with creating energy
- Generate revenues for the betterment of Native Hawaiians
- Increase the self-sustainability of the Hawaiian islands and reduce the import of oil
- Create local professional jobs

Historically, native Hawaiians have used volcanic heat directly for bathing and cooking, and so did the Maoris of New Zealand, another group of Pacific Islanders. Geothermal energy now provides more than 17 percent of New Zealand’s energy and serves as one of New Zealand’s cheapest energy sources. Indigenous Maori tribes are benefitting from the geothermal power plants on their tribal lands.

As Hawaii is the only U.S. state without an official geological survey, the University of Hawaii (UH) contributed a bulk of what we know about Hawai‘i’s geology. Since producing Hawai‘i’s first geothermal well (HGP-A) in the 1970s, UH has led Hawaii’s geothermal research. From the 1980s to now, UH contributed to two statewide geothermal resource assessments.

As a UH research unit, the Hawaii Groundwater and Geothermal Resources Center (HGGRC) is well equipped for geothermal exploration. Through HGGRC, the state’s most prominent earth scientists are researching Hawaii’s geothermal and groundwater resources. HGGRC obtained land access for research from dozens of landowners across the state. For research equipment, HGGRC has access to \$1 million worth of geophysical equipment and a \$3 million drill rig.

When the Department of Hawaiian Home Lands was considering geothermal development on Hawaiian home lands, HGGRC’s senior researchers Donald Thomas and Nicole Lautze shared their knowledge without charge. Collectively, these preeminent Hawaii geothermal scientists presented at least 5 presentations relating to their findings about geothermal resources on DHHL lands: 1 to DHHL, 3 to Sovereign Council of Hawaiian Homestead Associations.

New Zealand has demonstrated that geothermal energy can be produced while improving the quality of life for its residents including Maoris, respecting the Maori culture, and caring for the environment. Hawaii can do the same for the betterment of the native Hawaiians.

SB-2650

Submitted on: 2/7/2024 12:17:42 PM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Peter Sternlicht	Individual	Support	Written Testimony Only

Comments:

Exploration of geothermal resources on all islands is critical to Hawaii achieving energy sovereignty over the next few decades. Solar, wind and batteries will not serve our needs long term. Baseload power is essential to our economic wellbeing.

I strongly support the passage of this bill.

SB-2650

Submitted on: 2/7/2024 12:54:20 PM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Kilihea Inaba	Individual	Oppose	Remotely Via Zoom

Comments:

Will testify via Zoom.

SB-2650

Submitted on: 2/7/2024 7:33:11 PM

Testimony for HWN on 2/8/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Wai'ala Ahn	Individual	Oppose	Written Testimony Only

Comments:

Aloha,

I am Wai'ala Ahn a former resident of Lani Puna Gardens, Pohoiki and one of longest/closest residents of PGV until my 'ohana was relocated by the state through the geothermal relocation fund. As a resident of lower Puna, a kanaka maoli (native Hawaiian), a mother, keiki o kā 'āina of Hawai'i Nei, Pele practitioner, and someone whose lived first hand experience the reality of geothermal energy here on Hawai'i (which isn't done like it is done here anyone where else in the world), I adamantly opposed SB2650 and any other bills in support of expanding/supporting geothermal energy relating to geo exploration, for Health and Safety Reasons, for Cultural and sacrilegious reasons, for Environmental/ecological/conservation reasons, and finally for the lack/negligence of cooperate agency PGV/state/government follow through/transparency or regulation in regards to health/safety concerns/recommendations presented by the EPA in the 90's more with 19 actions needed for community safety that were NEVER implemented! that a third party report on toxic gases/contaminants from the drilled wells/ponds/etc were still and are still in use, even after 30 years. When all other geothermal operations retire wells after 20-25 years per safety/regulation. Also, that there still isn't proper monitoring or a community monitoring system with alarms/text/notification for concerned citizens. Even after countless lawsuits, settlements, medical records, and deaths. The state/government and the foreign cooperation who own/operate PGV need to do their due-diligence for the community, and environment by implementing the previous safety recommendations made by third parties like the EPA, they need to do listen/accommodate the concern community and organizations that have dedicated their lives to protecting lower Puna and Hawai'i Nei from the devastating and tragic realities of geothermal in Hawai'i; before any occupying entity asks for any exploratory drilling on this island or across Hawai'i Nei. The health and safety concerns of the past 30+ years have never been adequately addressed or a go faith effort put into working with the community on the damage that's already been done - which is an exhaustive list that no one should have to traumatically live again by having to repeat them over and over again at each county council/senate meeting or court room to get people to listen to our concerns and implement action. The legacy of Geothermal in Hawai'i is divisive, tragic, mobilizing and steeped in dangerous extractive capitalism that has and will continue to turn communities against one another for a false "Green future" that has already costed the land, people, environment and culture so much - all for the price for a few megawatts that shut off when the grid goes down, but that wouldn't shut off during the 2018 eruption, endangering the community even though the plant is by law/design/regulation supposed to be shut off during increased earth quake activitie - not to mention the toxic/explosive gases that went un-accounted for during 2018 and during the

whole timeline of operation. Why isn't there more transparency and notification for concerning issues? Due to this short list of concerns condensed here, and many many more unsaid by myself and others, I strongly oppose bill SB2650 or any other bill in regards to geothermal exploration/expansion now or in the future. Geothermal has become an example of asking or paying for forgiveness versus asking for permission in the past. Nows the opportunity for permission to be denied and not extended in anyway until previous and current health/safety, environmental and cultural concerns are met.

I urge you with the voice of my ancestors and for the health and safety for our keiki futures to Oppose SB2650. Due diligence must be done before this bill is ever even entertained. Mahalo for your time and consideration, please listen to the people who have been pleading, fighting and standing for over 30+ years to protect Hawai'i Nei.

Sincerely,

Wai'ala Ahn