JOSH GREEN, M.D. GOVERNOR

SYLVIA LUKE



LEODOLOFF R. ASUNCION, JR. CHAIR

NAOMI U. KUWAYE COMMISSIONER

COLIN A. YOST COMMISSIONER

Website: puc.hawaii.gov E-mail: puc@hawaii.gov

Telephone: (808) 586-2020 Facsimile: (808) 586-2066

Testimony of the Public Utilities Commission

HONOLULU, HAWAII 96813

To the
House Committee on
Consumer Protection and Commerce

April 16, 2025 2:00 p.m.

Chair Matayoshi, Vice Chair Chun, and Members of the Committee:

Measure: S.C.R. 136, S.D. 1, H.D. 1

Title: REQUESTING THE HAWAII STATE ENERGY OFFICE TO CONVENE A

NUCLEAR ENERGY WORKING GROUP TO STUDY THE FEASIBILITY OF USING ADVANCED NUCLEAR POWER TECHNOLOGIES IN THE

STATE.

Position:

The Public Utilities Commission ("Commission") supports this resolution and offers the following comments and amendments for consideration.

Comments:

The Commission appreciates the intent of this measure to initiate a coordinated, comprehensive investigation of the feasibility of nuclear power generation in the state of Hawaii. The Commission recognizes both the current constitutional restrictions on nuclear power generation in the State, as well as the technology's potential to support the clean energy transition in the future.

Due to the public safety and environmental risks associated with nuclear energy, its benefits and drawbacks should be carefully considered in any assessment of its potential application to our local geography. The Commission appreciates this measure's inclusion of the Commission in its proposed working group and, if requested by the Legislature, the Commission would willingly participate in the feasibility study of nuclear energy through such a forum.

Thank you for the opportunity to testify on this measure.

HAWAII STATE ENERGY OFFICE STATE OF HAWAII

JOSH GREEN, M.D. GOVERNOR

> SYLVIA LUKE LT. GOVERNOR

MARK B. GLICK

energy.hawaii.gov

CHIEF ENERGY OFFICER Telephone: (808) 451-6648

Web:

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

> Testimony of MARK B. GLICK, Chief Energy Officer

before the HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Wednesday, April 16, 2025 2:00 PM State Capitol, Conference Room 430 and Videoconference

> Offering Comments on SCR 136, SD1, HD1

REQUESTING THE HAWAII STATE ENERGY OFFICE TO CONVENE A NUCLEAR ENERGY WORKING GROUP TO STUDY THE FEASIBILITY OF USING ADVANCED NUCLEAR POWER TECHNOLOGIES IN THE STATE.

Chair Matayoshi, Vice Chair Chun, and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on SCR 136, SD1, HD1, which requests HSEO to convene a nuclear energy working group to study the feasibility of using advanced nuclear power technologies in the state.

HSEO notes that Article XI, section 8 of the Hawai'i State Constitution states, "No nuclear fission power plant shall be constructed or radioactive material disposed of in the State without the prior approval by a two-thirds vote in each house of the legislature." Therefore, a working group would need to have compelling evidence that nuclear power generation technologies met technical readiness criteria, delivered energy that was cost-competitive to what it was replacing, and could deliver and manage energy production in a safe and reliable manner.

The state's energy transition to 100% RPS by 2045 will require the full diversity of available renewable resource options, despite much of the focus being on affordable and abundant intermittent solar and wind resources. As a technical matter, advanced

^{1 1} Hawai'i State Constitution. https://lrb.hawaii.gov/constitution/.

Small Modular Reactors (SMRs) would likely better match electricity demand needs given Hawai'i's grid size and geography compared to conventional nuclear reactors, which have a longer global operational history, but are not likely well suited for Hawai'i due to a variety of reasons. Nationally, advanced SMRs have emerged as a goal of the U.S. Department of Energy to develop safe, clean, and affordable nuclear power options. The purported advantages of SMRs are that it can be built in relatively small physical footprints, can have reduced capital investment over full-scale conventional nuclear plants, and can provide incremental power generation at sizes ranging from 10 to 300 megawatts.

However, in terms of technical readiness, the Nuclear Energy Agency reported no operational SMRs deployed in the U.S as of 2024. Currently, there are only three SMRs operational worldwide, in China, Russia, and Japan.² The development of light water-cooled SMRs undergoes licensing review by the Nuclear Regulatory Commission (NRC), and planned SMRs in the U.S are in the pre-licensing phase, with none expected for deployment until 2030 at the earliest for prices that have yet to be determined.³

Given the current lack of cost, production, safety, and nuclear waste management information on SMRs, HSEO has no expectation that SMRs will be commercially available at cost-competitive prices for another decade and therefore believes the formation of a nuclear energy working group is premature. However, HSEO will continue to monitor SMR development as the technology advances and achieves higher levels of deployment. Furthermore, Governor Green's direction to HSEO has been to "conduct a full-scale analysis of every possible energy source, except nuclear, that can accelerate Hawai'i's transition away from fossil fuel dependence."

Therefore, HSEO requests that the creation of a nuclear working group be set aside until commercial SMR units have been installed successfully elsewhere in the United States, installation and operational costs are available, and waste management

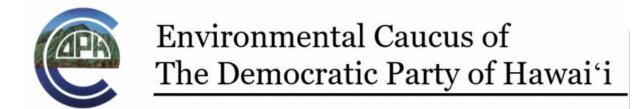
² NEA (2024), The NEA Small Modular Reactor Dashboard: Second Edition, OECD Publishing, Paris. Retrieved from: https://www.oecd-nea.org/jcms/pl_90816/the-nea-small-modular-reactor-dashboard-second-edition

³ Id.

Hawai'i State Energy Office SCR 136, SD1, HD1 - Comments April 16, 2025 Page 3

systems and processes have been deployed and proven to be safe, reliable, and cost-effective. At such time, it would be more appropriate to expend time and resources to evaluate the potential and applicability of nuclear energy for power generation in Hawai'i.

Thank you for the opportunity to testify.



April 15, 2025

Testimony in Opposition to SCR136, SD1, HD1 REQUESTING THE HAWAII STATE ENERGY OFFICE TO CONVENE A NUCLEAR ENERGY WORKING GROUP TO STUDY THE FEASIBILITY OF USING ADVANCED NUCLEAR POWER TECHNOLOGIES IN THE STATE

To: Chair Scot Z. Matayoshi, Vice Chair Cory M. Chun, and Members of the Committee on Consumer Protection & Commerce

Date: Wednesday, April 16, 2025, Time: 2:00 p.m. Place: Conference Room 430 & via

videoconference

From: Environmental Caucus of the Democratic Party of Hawai'i

Aloha Chair Matayoshi, Vice Chair Chun, and Members of the Committee,

The Environmental Caucus of the Democratic Party of Hawai'i strongly opposes SCR136, SD1, HD1, which requests the Hawai'i State Energy Office to convene a nuclear energy working group to study the feasibility of using advanced nuclear power technologies in the state. While exploring diverse energy solutions is important, nuclear energy poses unacceptable risks and challenges that make it unsuitable for Hawai'i.

Arguments in Opposition:

- Environmental Risks: Nuclear energy carries significant hazards, as seen with the catastrophic accidents in Chernobyl (1986) and Fukushima (2011). Hawai'i's proximity to the ocean and unique ecosystems amplify the potential consequences of radioactive contamination, putting marine life and our 'āina at great risk.
- Waste Management Challenges: Even advanced nuclear technologies produce
 radioactive waste that remains hazardous for thousands of years. Hawai'i lacks the
 infrastructure and geological conditions necessary for the safe storage and disposal of
 such waste, leaving unresolved long-term risks.
- Transportation Risks: Transporting nuclear materials to and within Hawai'i presents additional safety challenges. The potential for accidents during transport could jeopardize the health and safety of residents, as well as the environment.

- **Economic Viability:** Nuclear energy development and maintenance are prohibitively expensive. Investing in nuclear power would divert critical resources from proven, cost-effective renewable energy solutions such as solar, wind, and geothermal.
- Renewable Energy Goals: Hawai'i is progressing steadily toward achieving its 100% renewable energy portfolio by 2045. Introducing nuclear energy is inconsistent with this vision and could hinder ongoing efforts to expand clean, sustainable energy alternatives.
- Community Concerns: Hawai'i's residents have historical awareness of the dangers of
 nuclear technology, particularly due to the legacy of nuclear testing in the Pacific. Local
 communities would likely oppose nuclear energy due to valid safety concerns and
 cultural sensitivities.
- Hawai'i State Constitution Prohibition Standard: Article XI, Section 8 of the Hawai'i State Constitution prohibits the construction of nuclear fusion power plants or the disposal of radioactive material in the state without prior approval by a two-thirds vote in each house of the legislature. This constitutional safeguard reflects the state's commitment to protecting its natural resources and prioritizing public safety.
- Alternative Solutions: Hawai'i has abundant renewable energy resources that can be further developed to meet the state's energy needs. Increased investment in energy efficiency, grid modernization, and community-based renewable projects provides a safer, equitable, and sustainable energy path forward.

For these reasons, we urge the Committee to reject SCR136, SD1, HD1. Nuclear energy is not compatible with Hawai'i's commitment to sustainability, safety, and environmental stewardship.

Mahalo for the opportunity to testify in opposition to this resolution.

Respectfully submitted,

Melodie Aduja and Alan Burdick Co-chairs, Environmental Caucus of the Democratic Party of Hawai'i

Submitted on: 4/15/2025 9:43:11 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Mele Stokesberry	Maui Peace Action	Oppose	Written Testimony Only

Comments:

On behalf of my Maui organization Maui Peace Action, I am strongly opposed to SCR136 and urge you to **NOT** move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawai'i's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

this is a wasteful, very BAD resolution and has no place in Hawai'i.

Mahalo."

Submitted on: 4/15/2025 10:11:31 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Jim Albertini	Malu 'Aina Center for Non-violent Education & Action	Oppose	Written Testimony Only

Comments:

Our organization is strongly opposed to SCR136 and urge you to NOT move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents. It is also in direct conflict with Hawaii County's historic nuclear-free law passed in 1981. Who is behind this effort? Please name names. Mahalo.

JIm Albertini, president of Malu 'Aina



To: House Committee on Consumer Protection & Commerce (CPC)

From: Sherry Pollack, Co-Founder, 350Hawaii.org

Date: Wednesday, April 16, 2025, 2pm

In strong opposition to SCR136 SD1 HD1

Aloha Chair Matayoshi, Vice Chair Chun, and members of the CPC committee,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org is in **strong opposition to SCR136 SD1 HD1** requesting the Hawai'i State Energy Office convene a nuclear energy working group to study the feasibility of using advanced nuclear power technologies in the state. 350Hawaii is extremely concerned about SCR136 SD1 HD1 and the economic and environmental harms it would lead to should it be passed and implemented.

We realize that this measure would just establish a working group, but **why direct our limited resources on something that the Energy Office has already indicated would be an expensive form of energy**, let alone the environmental risks? Ratepayers and taxpayers do not need this type of wastefulness.

The text in this measue is **rife with factually inaccurate information**, including the statement that nuclear power is "carbon-free electricity". In fact, there is no such thing as a zero- or close-to-zero emission nuclear reactor. Even existing reactors emit due to the continuous mining and refining of uranium needed for the reactor. Essentially, this measure is straight from the false narrative talking points promoted by the nuclear industry. Unfortunately, for those unfamiliar with this technology, it sounds like the panacea Hawaii has been waiting for.

Bottom line, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and *funded* for at least 200,000 years? And the more nuclear waste that accumulates, the greater the risk of radioactive leaks, which can damage water supply, crops, animals, and humans. And even if proponents of this measure suggest we can just send the waste off somewhere else, why would we want to pollute somebody else with the radioactive waste for 200,000 years? This is not a pono plan.

As for the "next-generation nuclear solutions" small modular reactors (SMRs), and the promise of "safer and more flexible deployment options with lower risks associated with waste" that nuclear proponents claim, this is nothing but hype promoted by the nuclear industry and is **not backed by evidence**. The truth is, SMRs simply are not viable. In a nutshell, **SMRs are unproven, too expensive, too slow to**

build, have unresolved safety risks, and are too risky to play a significant role in the critical transitioning from fossil fuels that must occur in the coming 10-15 years. Case in point, researchers at Stanford's Center for International Security and Cooperation showed that SMRs exacerbate the challenges of nuclear waste management and disposal and that most SMR designs will increase the volume of nuclear waste in need of management and disposal by a factor of 2 to 30 compared with traditional reactors in the case study. Stanford scientists note that small modular reactors don't even exist commercially, that is why they have been nicknamed "vaporware."

Moreover, SMRs cannot be counted on to provide "firm" power as has been touted. Just like today's nuclear plants, SMRs will be vulnerable to extreme weather events or other disasters that could cause a loss of offsite power and force them to shut down. Additionally, the push for SMRs often serves the private interests of billionaires looking to power AI data centers rather than benefiting the people of Hawaii. Bottom line, SMRs are wishful thinking rooted in misinformation.

The legislature should invest our limited resources in truly clean energy sources and energy efficiency, **not boondoggle distractions**. This is critical if Hawaii is to achieve our clean energy goals and create the good, clean-energy jobs that will result from these efforts.

We strongly urge the Committee to OPPOSE and not advance this misguided and harmful measure. Nuclear power has no place in Hawaii's clean energy future.

And finally, we are compelled to express our serious concerns regarding the <u>process</u> for which this measure came to its current amended form. We note that during the decision making portion of the last hearing for this measure, the entire contents of SCR136 were removed, and replaced by new content that is unrelated in either subject or substance to the original measure, using text from a measure that died earlier this session. Rules prohibiting this type of content replacement only apply to bills not resolutions. However, circumventing legislative deadlines should be considered a harmful practice that lawmakers should refrain from, regardless. To have something like this occur at this stage in the legislative session, and with limited opportunity to notify the public who would want to know and weigh in, only serves to create more distrust in government. For this reason alone, the Committee should HOLD this ill-conceived measure.

Mahalo,

Sherry Pollack, 350Hawaii

Comments before April 16, 2025 House Consumer Protection and Commerce Committee

OPPOSING

Senate Concurrent Resolution 136

Relating to Geothermal Nuclear Power

Mike Ewall, Esq. Founder & Director Energy Justice Network

215-436-9511 mike@energyjustice.net www.EnergyJustice.net

Aloha Honorable Committee members. Energy Justice Network is a national organization supporting grassroots groups working to transition their communities from polluting and harmful energy and waste management practices to clean energy and zero waste solutions. In Hawai'i, we've been working with residents who first sought our support in 2015. Since mid-2022, we have supported residents in forming the Hawai'i Clean Power Task Force and Kōkua nā 'Āina to address numerous energy and waste issues in the state.

We urge that you oppose SCR 136, not only because it's a bait-and-switch that went through the Senate and approached EEP as a geothermal resolution, denying the public opportunity to comment on this as a nuclear power resolution until now, but because nuclear power is dead wrong for anywhere, but especially for Hawai'i.

<u>Nuclear power</u> cannot exist without uranium mining, milling, conversion, enrichment, fuel fabrication, the reactors themselves, and nuclear waste dumps. Every step in this process — plus tangents like depleted uranium use in war, enriched uranium used in nuclear bombs, and reprocessing used to "recycle" nuclear fuel — devastates a different set of communities with radioactive and toxic pollution. Fossil fuels and massive government subsidies make it all possible.

Nuclear power on Hawai'i makes no sense, as it would require dangerous cross-ocean shipments of radioactive fuel and waste. It would stand in the way of the state's Renewable Portfolio Standard requirement of 100% renewable energy by 2045, which means it would only operate for about decade at best, since it would take about a decade to build.

The size is inappropriate, as a conventional 1,000 MW sized reactor would be too large for any island other than O'ahu, and would be so large on O'ahu that relying on it for close to half the island's power would be very risky when that one facility is down for refueling or for any other reason.

Small modular reactors are not wise, either, as they <u>cost more</u> and <u>make more waste</u> per unit of energy, and are still experimental fantasies, not commercialized reality. No designs for "advanced" or small modular reactors (SMRs) have been approved since a <u>now-abandoned design was partially approved</u> five years ago. Even the Hawai'i State Energy Office <u>opposed</u> the pro-nuclear Senate Bill 1588 for that reason, requesting "that the creation of a nuclear task force be set aside until commercial SMR units have been installed elsewhere, and operational

data, installation cost, and waste management systems have been developed and can be evaluated for applicability in Hawaii."

Nuclear power is far too expensive, centralized, and dangerous to be considering. Here's a recap of some of the reasons we don't support nuclear power (new or existing):

- 1. it's totally unnecessary (conservation, efficiency, wind, solar and energy storage can meet all of our electricity needs... much sooner, cleaner, and cheaper)
- 2. it takes about a decade to license and build a new nuclear reactor... not a good time frame for trying to tackle global warming.
- 3. it's the most <u>expensive</u> and <u>subsidized</u> form of power there is, sucking up the money needed to do any real transition to clean energy. It's impossible to do nuclear power without billions in public subsidies. Wall Street won't touch it. None have ever been built without massive government subsidies, and even with them, the industry is collapsing under its own financial weight.
- 4. it's the most dangerous form of power. It's the only one where a single plant can make entire areas of the earth uninhabitable. With fossil fuels, it takes an entire fleet many decades to cause global warming. With nuclear power, it takes hours for one plant to contaminate an entire region (and later, the world).
- 5. it's notorious for accidents, not to mention terrorism risks.
- 6. normal operation of nuclear power releases radioactive pollution that contaminates reactor communities and food supplies that travel throughout the country/world.
- 7. there's no solution for the waste, which lasts effectively forever. All waste dumps in the U.S. have leaked. Fuel pools full of highly irradiated fuel rods are unsafely overpacked.
- 8. it's incredibly centralized and controlled by giant corporations that corrupt our government.
- 9. it sucks up massive amounts of cooling water (and sea turtles and fish...)
- 10. it's not even a solution to global warming, as uranium enrichment is so energy intensive that it takes the output from entire coal plants to power it, not to mention all of the fossil fuels used in mining, milling, conversion, enrichment, fuel fabrication, the reactor itself, waste management, and transportation between all of these steps. The enrichment process alone releases a large portion of the potent global warming-causing and ozone-depleting CFC-114 in the U.S. (which is banned in most other uses).
- 11. it lays waste to more land than coal mining does, as uranium in its natural form is not very dense, and the U-235 needed is only 0.7% of uranium that is mined, requiring milling, conversion and enrichment to get that fraction up to 4-5% for reactor fuel, creating a lot of "depleted uranium" (U-238) in the process.
- 12. it's intimately linked to nuclear weapons through the enrichment process. Countries with "peaceful" nuclear programs have the same equipment needed to make nuclear bombs. Nuclear material being around also makes terrorist dirty bombs easy to get.
- 13. it's one of the most racist of energy industries, in terms of communities impacted by <u>uranium mining</u>, <u>nuclear waste disposal</u>, <u>depleted uranium</u> use, and <u>uranium enrichment</u>, especially regarding <u>Indigenous peoples</u>.

- 14. there isn't enough uranium to scale up nuclear power. Thorium isn't a feasible alternative. Fusion isn't, either. Molten salt reactors have always been a disaster. Small modular reactors are unproven and uncertified, and are even more expensive than conventional reactors, and produce more waste per megawatt of energy generated.
- 15. they can't take the heat and sometimes have to shut down in the hottest summer days when their power is needed for air conditioning demand
- 16. they can't readily turn on or off, so their baseload nature makes them incompatible with deploying a grid primarily on intermittent renewables

How expensive are new nuclear reactors? The new Vogtle reactor in Georgia took <u>7 years</u> longer than promised and was \$17 Billion over budget. These sorts of delays and cost overruns are typical in the industry internationally.

See this summary Table 1-2 from page 24 of the latest Energy Information Administration's latest (Jan 2024) study on power plant costs, "Capital Cost and Performance Characteristics for Utility-Scale Electric Power Generating Technologies," https://www.eia.gov/analysis/studies/powerplants/capitalcost/pdf/capital cost AEO2025.pdf

Nuclear power (rows 8 and 9) are among the most expensive power plant technologies to build or operate and maintain (fixed O&M), second only to biomass with 95% carbon capture (which is one reason why Hu Honua is going nowhere).

Case No.	Technology	Description	Net Nominal Capacity (kW)	Net Nominal Heat Rate (Btu/kWh)	Capital Cost (\$/kW)	Fixed O&M Cost (\$/kW-year)	Variable O&M Cost (\$/MWh)	Nitrogen Oxide (NOx) (Ib/MMBtu)	Sulfur Dioxide (SO ₂) (Ib/MMBtu)	Carbon Dioxide (CO ₂) (lb/MMBtu)
1	USC Coal without Carbon Capture – Greenfield	1 x 735 MW Gross	650	8,638	\$4,103	\$61.60	\$6.40	0.06	0.09	206
2	USC Coal 95% Carbon Capture	1 x 819 MW Gross	650	12,293	\$7,346	\$86.70	\$13.73	0.06	0.09	10.3
3	Aeroderivative CTs – Simple Cycle	4 x 54 MW Gross	211	9,447	\$1,606	\$9.56	\$5.70	0.0075	0.00	117
4	CTs – Simple Cycle	1 x H-Class	419	9,142	\$836	\$6.87	\$1.24/ MWh, \$23,100/ Start	0.0075	0.00	117
5	CC 2x2x1	2 x 1 H Class	1,227	6,266	\$868	\$12.12	\$3.41	0.0075	0.00	117
6	CC 1x1x1, Single Shaft	1 x 1 H Class SS	627	6,226	\$921	\$15.51	\$3.33	0.0075	0.00	117
7	CC 1x1x1, Single Shaft, with 95% Carbon Capture	1 x 1 H Class SS	543	7,239	\$2,365	\$24.78	\$5.05	0.0075	0.00	6
8	Biomass Plant with 95% Carbon Capture	1 x BFB	50	19,965	\$12,631	\$261.18	\$9.65	0.08	<0.03	10.3
9	Advanced Nuclear (Brownfield)	2 x AP1000	2,156	10,608	\$7,861	\$156.20	\$2.52	0	0	0
10	Small Modular Reactor Nuclear Power Plant	6 x 80 MW Small Modular Reactor	480	10,046	\$8,936	\$121.99	\$3.19	0	0	0
11	Geothermal	Binary Cycle	50	N/A	\$3,963	\$150.60	\$0.00	0	0	0
12	Hydroelectric Power Plant	New Stream Reach Development	100	N/A	\$7,073	\$33.54	\$0.00	0	0	0
13	Onshore Wind – Large Plant Footprint: Great Plains Region	200 MW 2.8 MW WTG	200	N/A	\$1,489	\$33.06	\$0.00	0	0	0
14	Onshore Wind – Repowering/Retrofit	150 MW 1.5 - 1.62 MW WTG	150	N/A	\$1,386	\$38.55	\$0.00	0	0	0

15	Fixed-bottom Offshore Wind: Monopile Foundations	900 MW 15 MW WTG	900	N/A	\$3,689	\$154.00	\$0.00	0	0	0
16	Solar PV with Single-Axis Tracking	150 MW _{AC}	150	N/A	\$1,502	\$20.23	\$0.00	0	0	0
17	Solar PV with Single-Axis Tracking and AC-Coupled Battery Storage	150 MW _{AC} Solar 50 MW 200 MWh Storage	150	N/A	\$2,175	\$38.39	\$0.00	0	0	0
18	Solar PV with Single-Axis Tracking and DC-Coupled Battery Storage	150 MW _{AC} Solar 50 MW 200 MWh Storage	150	N/A	\$2,561	\$39.24	\$0.00	0	0	0
19	BESS	Lithium Ion, 150 MW 600 MWh	150	N/A	\$1,744, (\$436/kWh)	\$40.00	\$0.00	0	0	0

Some good materials to review to learn more about how nuclear power is NOT a climate solution, or any sort of solution, are here:

https://www.nrdc.org/experts/ralph-cavanagh/guest-blog-amory-lovins-future-diablo-canyon

https://www.forbes.com/sites/amorylovins/2019/11/18/does-nuclear-power-slow-or-speed-climate-change/

http://archive.beyondnuclear.org/fact-sheets/

https://www.nirs.org/basics-of-nuclear-power/nuclear-power-frequently-asked-questions/

https://climateandcapitalism.com/2021/06/23/10-reasons-why-climate-activists-should-not-support-nuclear/

https://eu.boell.org/en/2021/04/26/7-reasons-why-nuclear-energy-not-answer-solve-climate-change

https://www.ewg.org/news-insights/news/why-small-modular-nuclear-reactors-wont-help-counter-climate-crisis

https://thebulletin.org/2021/08/us-attorney-details-illegal-acts-at-construction-projects-sealing-the-fate-of-the-nuclear-renaissance/

Mahalo for your consideration.



Sustainable Energy Hawai'i

sustainableenergyhawaii.org info@sustainableenergyhawaii.org

Testimony in SUPPORT of SCR136_SD1 HD1 Nuclear Power Working Group

April 15, 2025

HOUSE OF REPRESENTATIVES
THE THIRTY-THIRD LEGISLATURE
REGULAR SESSION OF 2025

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Scot Z. Matayoshi, Chair Rep. Cory M. Chun, Vice Chair

Committee Members:

Rep. Greggor Iligan, Rep. Linda Ichiyama, Rep. Kim Coco Iwamoto, Rep Sam Satoru Kong, Rep. Nicole E. Lowen, Rep Lisa Marten, Rep Adrian K. Tam, Rep Elija Pierick

I'm testifying on behalf of **Sustainable Energy Hawai'i (SEH)**, a 501(c)3 non-profit and CBO 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, 100% locally sourced renewable energy.

SEH supports SCR136_SD1 HD1, which requests

"THE HAWAII STATE ENERGY OFFICE TO CONVENE A NUCLEAR ENERGY WORKING GROUP TO STUDY THE FEASIBILITY OF USING ADVANCED NUCLEAR POWER TECHNOLOGIES IN THE STATE"

SEH supports establishing a broad-based working group of stakeholders to evaluate the status and impacts of the regulatory environment surrounding the research and development of nuclear power generation technology across the State of Hawai'i.

The governor issued Executive Order No. 25-01 calling for, among other actions to "... stabilize and reduce energy costs, lower the State's carbon footprint, fortify energy security, and gain access to capital for the energy transition ..."

Hawaii has legislated a mandate that 100% of its electrical power be generated from non-fossil fuel resources. Factors surrounding the execution of these obligations include:

Solar, wind, and battery storage will not support the scope or scale required for Hawai'i's
energy transition without the presence of firm, dispatchable baseload power generation.
Only two technologies can deliver that generation availability without carbon emissions:
Geothermal and Nuclear.



Sustainable Energy Hawai'i

sustainableenergyhawaii.org info@sustainableenergyhawaii.org

- According to a recent analysis conducted by Sustainable Energy Hawaii, the generation capacity needed to fulfill our energy commitments on Oahu alone could be 20 TWh or more annually. That is twice what currently is consumed statewide.
 - o Available land on Oahu is not conducive to solar or wind deployments at that scale.
- Traditional Gen I and Gen II nuclear power generation have a social stigma associated with its use. The facts do not support that status.
 - Current innovations, especially within the systems' designs surrounding molten salt reactors using Thorium Fluoride salt as a fuel, are considered safe and could be capable of delivering power to the grid for under \$0.05/kWh.
 - One systems developer, Copenhagen Atomics, is targeting a modular system capacity of 40 MW(e) on a footprint slightly larger than a 40' shipping container.
- Given the need, cost, and time needed to validate mitigation options, and in light of the
 governors' call in the above-referenced Executive Order to "gain access to capital for the
 energy transition," public sector funding will not be sufficient to realize the goal. Private
 sector investment will be required.
- Historically, that investment has met resistance due to at least two obstacles, which can be mitigated through public policy modernization.
 - A public understanding of energy and the role it plays in everyone's lives. It is our economy.
 - An existing regulatory environment that contributes to Hawai'i's reputation as a state where it can be difficult to do business. With policy modernization, the investments will follow.

As this resolution does not seek funding in support of the proposed working group's operation and given the urgency the state has to implement a strategy to phase out the use of fossil fuels and technologies with the capacity to sustain our economy in a decarbonized world are required, creating a policy environment that will encourage private sector investment is essential. Therefore, I respectfully ask for the committee's support in passing an amended SCR No. 136 S.D.1, HD1.

Sincerely

Peter Sternlicht

Member, Board of Directors Sustainable Energy Hawai'i Aloha CPC Chair, Vice Chair, and Committee Members,

My name is Dave Mulinix, I am CoFounder and State Representative of Greenpeace Hawaii; on behalf of our thousands of members and supporters in the State of Hawaii we stand in STRONG OPPOSITION to SCR136 - Requesting the Hawaii State Energy Office to convene a Nuclear Energy Working Group to study the feasibility of using advanced nuclear power technologies in the state.

The goals of this resolution are to: (1) Study the feasibility of using advanced nuclear power technologies in the State; (2) Evaluate the benefits, risks, and barriers to developing and using advanced nuclear power technologies in the State, including regulatory, statutory, financial, social, and environmental factors; and (3) Identify potential short-term and long-term nuclear energy goals for the State; and finally that the Hawaii State Energy Office is requested to submit an interim report of the working group's findings. Essentially the Nuclear Energy Working Group's goal is to research various so called new advanced nuclear technologies to see if they are a feasible option for Hawaii. The reality is that the nuclear industry is constantly coming up with "new ideas" to repackage and sell their expensive dirty nuclear power to the public. The truth is, nuclear power has serious safety issues, is highly toxic for 200,000 years, and is the most expensive source of energy on the planet.

Nuclear proponents advocate using new, supposedly safer, reactor designs as a climate solution to produce safe, clean, and cheap power. These untested designs, such as Small Modular Reactors, Integral Fast Reactor, Pebble Bed Modular Reactor, Thorium Fueled Reactors, and Molten Salt Reactors are all still in the experimental stage. The designs—all of which have been around for decades, will still take further decades to bring into commercial operation. To achieve even that would require utilities to want to build them, but none do. Their costs would be even higher than current reactor designs, which is one reason utilities aren't interested. Safety-wise, the designs are unproven and would require extensive and time consuming testing before the federal Nuclear Regulatory Commission could license them. Waiting for such reactors to materialize would forestall much faster and cheaper ways to produce power.

Five additional points that already clearly demonstrate, without the need for expending resources for a Nuclear Energy Working Group, that nuclear power is not, has never been, and will never be a feasible option for Hawaii:

- 1) Hawaii's constitution explicitly prohibits nuclear fission power plants without legislative approval (Article XI, Section 8). This critical provision protects the health and safety of Hawaii's residents and reflects long-standing public opposition to nuclear energy.
- 2) Creating a Nuclear Energy Working Group is unnecessary. Hawaii's constitution, existing laws, and community values have already rejected nuclear power as a feasible option. Hawaii's people have made it clear that we do not want dirty, dangerous, expensive nuclear power in our state. Establishing this Nuclear Energy Working Group would be a waste of taxpayer money and distracts attention away from actual viable clean energy technologies that have proven to cut climate-killing carbon emissions.
- 3) The Three Mile Island, Chernobyl, and Fukushima nuclear power plant disasters have cost millions of dollars in an attempt to clean them up, but have permanently contaminated their regions, proving that nuclear power is not safe, clean, or cheap. Nuclear power has been around for some 70 years, and to date there is no guaranteed 100% safe way to produce nuclear power, and once a nuclear disaster occurs there is no way to re-close Pandora's Box, and the nuclear disaster site will be irreversibly

contaminated essentially forever. A nuclear disaster in Hawaii would basically kill the tourist industry in our state.

- 4) For some 70 years the U.S. government has searched the entire Earth and so far has found no safe place to store nuclear waste. The waste from nuclear power plants are currently stored on site until a viable way to permanently store the waste can be found. If we can't find a safe place on Oahu to build a new landfill, then how are we going to find a place to store nuclear waste that will remain toxic for some 200,000 years?
- 5) According to the Nuclear Regulatory Commission, the emergency planning zone around a nuclear power plant typically extends to a 10-mile radius for immediate radiation exposure concerns, while a broader "ingestion pathway" zone reaches out to a 50-mile radius where food and water contamination could occur in the event of an incident. None of Hawaii's islands have the land mass to fulfill this NRC basis safety requirement, and would make safely siting even a Small Modular Nuclear Reactor in Hawaii impossible.

This idea to bring nuclear power to Hawaii is a fool's errand, not unlike the project from the Gulliver's Travels where Professors at the Lagado Academy of Projects were trying to produce cheap energy by attempting to extract sunbeams out of cucumbers, then enclose the sunbeams in hermetically sealed vials to produce heat and light at a reasonable rate! Forming this Nuclear Energy Working Group is a very similar endeavor and will also be a wasted effort. It is scientifically clear that you can't extract sunbeams from cucumbers to produce cheap energy, that alchemists can't transmute lead into gold, and there is no feasible, safe, clean, or inexpensive way to produce nuclear power in Hawaii. Why should we waste our staffs time, taxpayer money, and precious resources on something we already know the answer to?

Please Vote NO on SCR136 that will waste taxpayer money and distract attention away from actual viable clean energy technologies that have proven to cut climate-killing carbon emissions.

Mahalo Dave Mulinix, CoFounder and Hawaii State Representative Greenpeace Hawaii

References:

Nuclear Information and Resource Service/World Information Service on Energy Nuclear Power and Climate: Why Nukes Can't Save the Planet https://www.nirs.org/wp-content/uploads/factsheets/nukesclimatefact614.pdf

Union of Concerned Scientists Small Modular Reactors: Safety, Security and Cost Concerns https://www.ucsusa.org/resources/small-modular-reactors

Bulletin of Atomic Scientists

Say No to Small Modular Reactors: Stop normalizing the exploitation of nature https://thebulletin.org/2024/04/say-no-to-small-modular-reactors-stop-normalizing-the-exploitation-of-nature/

Bulletin of the Atomic Scientists

A Small Modular Reactor's demise calls for big change in Energy Department policy https://thebulletin.org/2023/11/a-small-modular-reactors-demise-calls-for-big-change-in-energy-department-policy/

Bulletin of the Atomic Scientists

Can Small Modular Reactors help mitigate Climate Change? https://thebulletin.org/premium/2021-07/can-small-modular-reactors-help-mitigate-climate-change/

Union of Concerned Scientists

Small Nuclear Reactor Contract Fails, Signaling Larger Issues with Nuclear Energy Development in U.S.

 $\underline{https://www.ucsusa.org/about/news/small-nuclear-reactor-contract-fails-signaling-larger-issues-nuclear-energy-development}$

Bulletin of the Atomic Scientists

Molten Salt Reactors were trouble in the 1960s—and they remain trouble today https://thebulletin.org/2022/06/molten-salt-reactors-were-trouble-in-the-1960s-and-they-remain-trouble-today/

Union of Concerned Scientists Statement on Thorium-Fueled Reactors https://www.ucsusa.org/sites/default/files/legacy/assets/documents/nuclear_power/thorium-reactors-statement.pdf

The Project Gutenberg eBook of Gulliver's Travels, by Jonathan Swift https://www.gutenberg.org/files/829/829-h/829-h.htm

Establishing nuclear feasibility task force would be a waste of taxpayer money and distracts attention away from actual viable clean energy technologies that have proven to cut climate-killing carbon emissions.

A coupe of key points that already clearly demonstrate that we don't need to expend resources for a nuclear energy task force, because nuclear energy because we already know that nuclear energy is not a viable option for Hawaii.

- 1) The people of Hawaii have already rejected the nuclear power option that's why Hawaii's constitution explicitly prohibits nuclear fission power plants in Hawaii.
- 2) The Three Mile Island, Chernobyl, and Fukushima nuclear power plant disasters have cost millions of dollars in an attempt to clean them up but have permanently contaminated their regions, proving that nuclear power is not safe, clean, or cheap.
- 3) Nuclear proponents advocate using supposedly newer, safer reactors. However these untested designs, are such as the Integral Fast Reactor, Pebble Bed Modular Reactor, Thorium Fueled Reactors, Molten Salt Reactors, and others, including Small Modular Reactors are not actually new and have been around for decades and are all still in the experimental stage and none are even close to being commercially viable. Their costs would be even higher than current reactor designs. Safety-wise, the designs are unproven and would require extensive and time consuming testing before the federal Nuclear Regulatory Commission could license them.
- 4) For some 70 years the US government has searched the entire US and so far has found no safe place to store nuclear waste. So the waste from nuclear power plants are currently stored on site until a viable way to permanently store the waste can be found. If we can't find a safe place on Oahu to build a new waste dumb, then how are we going to find a place to store nuclear waste that will remain toxic for some 200,000 years?
- 5) According to the Nuclear Regulatory Commission (NRC), the emergency planning zone around a nuclear power plant typically extends to a 10-mile radius for immediate radiation exposure concerns, while a broader "ingestion pathway" zone reaches out to a 50-mile radius where food and water contamination could occur in the event of an incident. This would make safely siting a power plant, particularly on Oahu, impossible.

This idea to bring nuclear power to Hawaii is a fool's errand, not unlike the project from the Gulliver's Travels story where Professors at the Lagado Academy of Projects were trying to produce cheap energy by attempting to extract sunbeams out of cucumbers to produce heat and light at a reasonable rate!

It is clear that we already know without a task force that neither researching extracting sunbeams from cucumbers nor the viability of nuclear power in Hawaii would be a wasted effort. It is clear that nuclear energy in Hawaii is not a viable option.

Why should we waste our time, taxpayer money, and precious resources on something we already know the answer to?

Submitted on: 4/15/2025 8:39:02 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Alan B Burdick	Americans for Democratic Action Hawaii Chapter	Oppose	Written Testimony Only

Comments:

Americans for Democratic Action, Hawaii Chapter, strongly OPPOSES this Resolution. It would detract attention from serious efforts toward environmentally safe actions toward developing additional sources of power.

This state has had extreme difficulty in locating landfills. How can it safely and reasonably locate sites for nuclear power generation and waste disposal? It cannot. Our land masses are simply too small.

This Resolution would merely cause the State to waste money, time, attention, and other valuable resources. Please defer it. Thank you very much for the opportunity to testify.

Alan B. Burdick, ADA Hawaii Chapter President





Testimony in SUPPORT of SCR136_SD1 HD1



Nuclear Power Working Group

April 15, 2025

HOUSE OF REPRESENTATIVES

THE THIRTY-THIRD LEGISLATURE

REGULAR SESSION OF 2025

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

DEDICATED TO

Rep. Scot Z. Matayoshi, Chair

Rep. Cory M. Chun, Vice Chair

TRANSFORMING

Committee Members:

HAWAII'S ENERGY

Rep. Greggor Iligan, Rep. Linda Ichiyama, Rep. Kim Coco Iwamoto, Rep Sam Satoru Kong, Rep. Nicole E. Lowen, Rep Lisa Marten, Rep Adrian K. Tam, Rep Elija Pierick

LANDSCAPE,

GGAES supports SCR136_SD1 HD1, which is;

AND STRIVING

"REQUESTING THE HAWAII STATE ENERGY OFFICE TO CONVENE A NUCLEAR ENERGY WORKING GROUP TO STUDY THE FEASIBILITY OF USING ADVANCED GENERATION IV NUCLEAR POWER TECHNOLOGIES IN THE STATE"

FOR A CLEANER

I testify on behalf of Go Green Alternative Energy Solution, LLC, (GGAES). GGAES is dedicated to transforming Hawaii's Energy Landscape and Striving for a cleaner Environment.

ENVIRONMENT

Small modular reactors (SMRs) are gaining momentum as a cleaner, more flexible alternative to traditional nuclear power plants. Several companies and governments are actively developing and supporting SMR technology.

U.S.-Based Developers

- **NuScale Power**: Based in Oregon, NuScale's SMR design was the first to receive U.S. Nuclear Regulatory Commission (NRC) approval in 2023. Their modular reactors are designed to be scalable, with each unit generating 50 MW of electricity.
- **X-energy**: Developing the Xe-100 reactor, a high-temperature gas-cooled SMR. The company has attracted significant venture capital investment and is targeting deployment around 2030.

Woman & Native Hawaiian Owned



- **TerraPower**: Founded by Bill Gates, TerraPower is working on the Natrium reactor, which uses molten salt for cooling. The company aims to have its first unit operational by 2030.
- **Holtec International**: In Michigan, Holtec plans to revive the decommissioned Palisades nuclear plant and develop two SMRs. This project could serve as a model for similar initiatives in the UK.

United Kingdom Initiatives

- Rolls-Royce: The UK-based company is developing a 470 MW SMR and has partnered with ČEZ Group in the Czech Republic. Rolls-Royce is competing for UK government contracts.
- **Government Support**: Prime Minister Keir Starmer has announced plans to approve the Sizewell C nuclear power plant and to advance SMRs by selecting two companies from a competition. The UK government is reforming planning rules to allow more nuclear sites beyond the current eight designated locations.

Global Developments

- **Texas, USA**: Governor Greg Abbott's initiative to fund new nuclear power plants has reignited the anti-nuclear movement. The Texas Nuclear Alliance proposes legislative support and funding, but critics argue funds could be better allocated to less contentious and more cost-effective energy solutions.
- **Europe**: The European Commission has established an industrial alliance to accelerate the development of SMRs, aiming to deploy them by the early 2030s. Companies like Westinghouse and GE Hitachi are involved in these efforts.

Conclusion:

Small Modular Reactors (SMRs) are a more sustainable, reliable, and future-proof solution compared to fuel oil power production. While initial costs and regulatory hurdles remain for SMRs, they offer significant long-term benefits in terms of environmental impact, scalability, and energy independence.

1. Efficiency and Reliability

- **SMRs**: High capacity factor (>90%), meaning they operate consistently and are well-suited for baseload power.
- **Fuel Oil**: Lower efficiency and typically used for backup or peak load due to high operational costs.

Conclusion: SMRs offer more reliable and consistent power output.

2. Environmental Impact

- **SMRs**: Very low carbon emissions during operation. Long-term waste management is a concern, but tech is improving.
- **Fuel Oil**: High greenhouse gas emissions, air pollutants (NOx, SOx, particulate matter), and environmental risks from spills.

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AND STRIVING

FOR A CLEANER

ENVIRONMENT



Conclusion: SMRs are far more environmentally friendly in the long run.

3. Economic Factors

- **SMRs**: High upfront costs but lower long-term operating costs. Economic feasibility improves with standardization and deployment at scale.
- **Fuel Oil**: Lower initial investment, but volatile fuel prices and higher operating costs over time.

Conclusion: Fuel oil is cheaper short-term, but SMRs are more cost-effective over the long term, especially as SMR tech matures.

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ENVIRONMENT

4. Scalability and Flexibility

- **SMRs**: Modular design allows for phased construction and easier deployment in remote or smaller grids.
- **Fuel Oil**: Also flexible and quick to deploy, but typically not scalable for large demand without steep environmental cost.

Conclusion: SMRs are better for modern, scalable, and sustainable infrastructure.

5. Energy Security

- **SMRs**: Use uranium, which can be stockpiled and sourced from geopolitically stable regions.
- Fuel Oil: Heavily tied to global oil markets and vulnerable to supply shocks.

Conclusion: SMRs offer better long-term energy security.

I urge you to pass the resolution to create a nuclear power working group in order to evaluate and consider the pros and cons of using SMRs. Thank you for your time and attention to this important matter.

Best regards,

Russ Koehler

Russ Koehler, CEM
President
Go Green Alternative Energy Solutions, LLC.
rkoehler@GoGreenAES.com
GoGreenAES.com
(808) 265-2220

Submitted on: 4/15/2025 9:42:39 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
laurel brier	Kauai Women's Caucus	Oppose	Written Testimony Only

Comments:

UNACCEPTABLE SB1588 died and now this is brought in the back door. We believe the community strongly opposes wasting our money on a nuclear task force based on facts not the false promises and hype of the for profit nuclear industry.

Strong opposition to establishing a nuclear task force, or future exploration of nuclear power for Hawaii. Exploring nuclear power is a waste of resources and money .

Hawaii took a stand decades ago against nuclear power with a constitutional ban. Primarily because Hawaii's geological instability make it a dangerous location for storing nuclear waste and there are nonviable long-term solutions to containing radioactive materials. The transportation of nuclear to or from Hawaii is extremely dangerous. An 'accident' would have dire, long term consequences on our marine environment at the very least. The new technologies are unproven and costs for any nuclear option are prohibitive. Why this distraction or redirection of funds from Hawaii achieving its clean energy goals that we are clearly on our way to achieving with proven and appropriate technologies? Nuclear is not renewable nor is it carbon free considering the mining and refining process for uranium. Reputable climate action /environmental organization do Not support nuclear power. Please honor the will of the people and uphold Hawaii's constitution, a sustainable future, prioritize investing our resources in a clean, renewable energy future.



1201 F Street NW • Suite 1100 Washington, DC 20004 nei.org



Hawaii House Committee on Consumer Protection & Commerce Nuclear Energy Institute Public Testimony in Support of SCR 136 SD 1 HD 1

April 16, 2025

Please submit this statement as part of the record in support of SCR 136 SD1 HD1. The Nuclear Energy Institute (NEI) applauds Hawaii's consideration of the legislation, which allows the state to explore nuclear energy technology.

The energy sector in the United States has undergone significant transformation over the last decade and that transformation will continue. NEI recently conducted a survey of its member utilities and found that these utilities anticipated needing more than 100 gigawatts, (equivalent to more than 300 advanced reactors) of new nuclear power by 2050 in order to guarantee reliable access to clean energy. Non-electric sectors such as industrial heat and transportation are also considering nuclear energy to transition to a reliable, clean and affordable energy supply. Ensuring that state energy policies are in place that enable commercial deployment of advanced reactors by the early 2030s is essential to ensuring an affordable, secure, and resilient energy sector well into the future.

Nuclear energy is the single largest carbon-free electric generating source in both the United States and around the world. In the United States, our 94 nuclear reactors produced about half of all carbon-free energy. Nuclear plants operating in economically sustainable electricity markets can expect to safely and reliably produce clean electricity for up to 80 years.

SCR 136 SD 1 HD 1 will help spur safe deployment of the next generation of nuclear energy. While the United States once led the world in nuclear energy technology exports, we are no longer the leading supplier of nuclear reactors; we are in a race against other countries to capture a growing international market share, and by creating a pathway to commercial deployment here at home, we will unlock markets for U.S. technology across the globe.

Nuclear power is vital to the energy system

New advanced reactor designs are being developed by entrepreneurial U.S. companies seeking to expand the value of nuclear technology to our energy system. These designs will be commercially operational this decade and will be ready for large-scale deployment by the early 2030s to meet domestic and global clean energy needs. Enacting state policies that encourage the use of these new nuclear technologies is particularly timely, as the U.S. Energy Information Administration forecasts the retirement of 140 gigawatts of capacity by 2040 across the U.S. key focus of the energy sector will be to replace this retired generation with sources that are clean, reliable, and affordable.

In a recent study¹, Vibrant Clean Energy found that pairing nuclear with wind and solar is the most cost-effective means to decarbonize electricity generation. This lowest cost scenario projects nuclear energy could provide nearly 43% of all generation in 2050 with wind and solar producing almost 50%. A significant portion of the anticipated 300 GWe of advanced nuclear capacity that is needed could repurpose hundreds of retired fossil generation sites. A second scenario where solar and wind generate 77% of all generation in 2050 and the use of nuclear energy declines would result in over \$400 billion in higher costs to consumers.

Focusing only on the need for additional electricity in the U.S. in the upcoming decades would mistakenly overlook the likelihood of, and the need for, more energy in other sectors, such as transportation, industrial heat and hydrogen. Nuclear is the only clean, reliable and affordable energy source that can produce heat and steam that is needed for many of these processes.

Nuclear energy is poised to expand in the U.S.

NEI believes our nuclear energy future will include safe long-term operation of our existing nuclear power reactors through subsequent license renewals to allow operation out to eighty years or more.

The existing domestic nuclear fleet is a central part of our nation's critical infrastructure and should not be taken for granted. Nuclear energy in the state powers 1.9 million homes and accounts of 1,500 high-paying and reliable jobs. Policymakers in state capitals and Washington, D.C. have taken action to preserve twenty-two reactors that were at risk of closing prematurely, by valuing those reactors for their emissions-free generation. These actions have had the added benefit of preserving more than ten thousand jobs with family-sustaining wages.

Most recently, the U.S. Congress passed two consequential pieces of legislation, the Bipartisan Infrastructure Law and Inflation Reduction Act, that explicitly recognize advanced nuclear as a critical solution to our energy needs and provide significant financial incentives for the deployment of advanced reactors.² States are also taking action to pass policies to support advanced reactors, similar to the options identified in a recent NEI report.³

The United States, fueled by private capital and innovation, has recently experienced a surge in advanced reactor technologies with dozens of projects worth billions of dollars being announced over the last year. One thing is clear, states that have policies that support and encourage the deployment of advanced reactors, also have companies planning projects, which lead to future jobs and economic growth, in addition to the reliable, clean, and affordable energy.

¹ https://www.vibrantcleanenergy.com/wp-content/uploads/2022/06/VCE-NEI-17June2022.pdf

² https://www.nei.org/CorporateSite/media/filefolder/advantages/Current-Policy-Tools-to-Support-New-Nuclear.pdf

³ https://www.nei.org/CorporateSite/media/filefolder/resources/reports-and-briefs/State-Policy-Options-to-Support-New-Nuclear-Energy_NEI.pdf

Advanced reactors are an economic powerhouse

The electric utility sector in the United States is rapidly evolving. NEI believes it is in the best interest of the U.S. that nuclear power remains a significant and growing supply of clean energy as this evolution continues. Therefore, it is imperative that the commercial nuclear industry in the U.S. continue to rapidly innovate new products and designs so that these products are available when the market needs them.

According to an SMR Start report⁴, advanced reactors can be a cost competitive and highly valuable part of our future energy system. The report also outlines the tremendous benefits to jobs and the economy, stating:

"Construction and operation of a 600-megawatt SMR plant with multiple reactors is estimated to employ about 900 manufacturing and construction workers for about 4 years and about 300 permanent positions for the 60+ years the SMR operates." The data shows that each permanent position creates a multiplier effect resulting in 1.66 additional jobs in the local community and 2.36 additional jobs in the rest of the state. Nuclear jobs pay 36 percent more than average salaries in the local area.

"Based upon experience with a 1,000 MWe nuclear facility, a 600 MWe SMR plant is expected to generate over \$500M in direct and indirect economic output annually. This includes over \$270M in the plant's electricity sales and induced spending at the local, state and national levels of \$10M, \$48M, and \$236M, respectively. The SMR plant is expected to pay about \$10M in state and local taxes and \$40M in federal taxes annually." The advanced reactor supply chain could also create thousands of jobs to support a domestic and international market."

According to a recent NEI report⁵, micro-reactors can also be a cost competitive and highly valuable part of our future energy system. These micro-reactors are highly resilient and reliable, clean and environmentally friendly, simple and safe, and are capable of producing electricity and heat through flexible on-demand operations.

Likewise, other reports, such as the aforementioned SMR Start report, similarly conclude that slightly larger advanced reactors can be a cost competitive and highly valuable part of our future energy system. The report also outlines the tremendous benefits to jobs and the economy that an advanced reactor can bring.

⁴ https://smrstart.org/wp-content/uploads/2021/03/SMR-Start-Economic-Analysis-2021-APPROVED-2021-03-22.pdf

⁵ https://www.nei.org/CorporateSite/media/filefolder/resources/reports-and-briefs/Report-Cost-Competitiveness-of-Micro-Reactors-for-Remote-Markets.pdf

Conclusion

We appreciate and applaud Hawaii's support for nuclear energy. With this continued support and the dedication of the industry, NEI is confident that the U.S. will regain its leadership role in advanced nuclear technology and generation.

Last year 25 states took action to support nuclear. States with similar measures to Hawaii's include Connecticut, Indiana, Kentucky, Louisiana, Maryland, Michigan, Ohio, Tennessee, New Hampshire, Nebraska, Montana, Pennsylvania, Florida, Virginia and Texas.

On behalf of NEI and its members, we thank you for considering SCR 136 SD 1 HD1. By approving the working group, the Legislature will take the critical first step in evaluating the regulatory and policy landscape of nuclear energy in Hawaii.

Christine Csizmadia
Senior Director, State Government Affairs & Advocacy
Nuclear Energy Institute
1201 F Street, Suite 1100
Washington, DC 20004
P: (202) 739-8000 E: cmc@nei.org

Submitted on: 4/16/2025 10:19:53 AM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Sylvia Dolena	Kulia I Ka Nu'u Outreach and Aloha Lokahi Assoc.	Oppose	Written Testimony Only

Comments:

Nuclear energy is dangerous!! No one has mastered the safety factors to the planet.

OPPOSE SCR 136 and use the tax dollars for reforestation, for growing more food, etc.

Mahalo,

Sylvia Dolena

Submitted on: 4/14/2025 7:45:51 PM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Elizabeth A. Ho'oipo Pa Nakea	Individual	Oppose	Written Testimony Only

Comments:

TESTIMONY IN STRONG OPPOSITION TO S.C.R. No. 136, S.D. 1, H.D. 1 Submitted to the House Committee on Consumer Protection & Commerce Hearing Date: Wednesday, April 16, 2025 | 2:00 PM | Conference Room 430 & Videoconference

Chair Nakashima, Vice Chair Sayama, and Honorable Members of the Committee:

Aloha mai kākou,

My name is Elizabeth Pa Nakea. I am a lifelong resident of Hawai'i, having lived in Kalihiwai on Kaua'i, and in Kāne'ohe, Kailua, and now Makiki on O'ahu. I write today in strong opposition to S.C.R. No. 136, S.D. 1, H.D. 1, which calls for the creation of a working group to study advanced nuclear power technologies in Hawai'i.

This resolution does not merely study options—it steers us down a path lined with risk, radioactive waste, and historical trauma.

We must not forget.

We must not repeat.

We must not ignore the poisoned wells of Red Hill while entertaining another industry built on contamination.

Nuclear energy is not clean.

Its waste does not disappear. It cannot be diluted. It cannot be wished away. Spent fuel remains hazardous for tens of thousands of years. As of 2025, no permanent disposal facility exists anywhere in the world that safely handles high-level nuclear waste—not one (U.S. Government Accountability Office, 2021). And Hawai'i, with its fragile ecosystems, cultural landscapes, and volcanic geology, is no place to become the proving ground for these dangers.

Nuclear energy is not safe.

Fukushima proved that even in technologically advanced nations, the unimaginable does happen. Natural disaster, human error, and mechanical failure—these are not

hypotheticals; they are documented realities. On islands like ours, with limited emergency response and finite land, one incident could forever scar our home, our health, and our waters.

Nuclear energy is not pono.

How can we in good conscience contemplate nuclear expansion in a region already bearing the scars of colonial-era testing and uranium extraction? From the Marshall Islands to Native American lands, the nuclear industry has left a legacy of disproportionate harm on Indigenous peoples (ICAN, 2019). In Hawai'i, where we profess to live by the values of mālama 'āina and kuleana to our keiki, this proposal rings hollow.

To those who argue that nuclear is our clean, firm future—remember Red Hill. Remember the fuel leaks.

Remember the silence.

And then ask yourselves: What happens when the waste has nowhere to go, and the promises collapse under pressure?

We already have better options.

Hawai'i is rich in solar, wind, and ocean energy. These sources are not only safer but also cheaper, faster to deploy, and better aligned with local ownership and community control (U.S. Energy Information Administration, 2023). Geothermal energy—already being explored in earlier versions of this resolution—deserves further study, not to be discarded for dangerous distractions.

Let us be clear:

We need energy that empowers, not energy that endangers.

We need solutions that restore, not technologies that destroy.

We need policy rooted in aloha, in truth, and in responsibility—not in the illusion of quick fixes.

I respectfully urge you to reject this nuclear pivot and restore the resolution's earlier focus on safer, community-centered energy dialogues. Let us move toward a future that is resilient, regenerative, and truly reflective of our values.

Mahalo nui loa for your consideration.

With utmost respect, Elizabeth Pa Nakea 1644 Liholiho Street, Suite P

Honolulu, HI 96822

panakealaw@me.com

(808)308-2654

Submitted on: 4/15/2025 7:25:31 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
helen raine	Individual	Oppose	Written Testimony Only

Comments:

Please do not go ahead with this wasteful bill. Nuclear power is not a sensible option in Hawaii and will be vigorously opposed. There are many less harmful alternatives.

Submitted on: 4/15/2025 8:35:45 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Michael Goodwin	Individual	Oppose	Written Testimony Only

Comments:

This Nuclear Energy Working Group would have nothing to work on, as the technology won't be available until well after the sunset date of the Group, if ever. as a resident of Kaua`i I am wary of Oahu's ability to locate a nuclear waste depository, Why not transport it to one of the other islands? Stay the course with renewable energy.

Submitted on: 4/15/2025 8:36:39 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Patricia Blair	Individual	Oppose	Written Testimony Only

Comments:

I strongly oppose any thought of toxic nuclear energy in Hawaii. So just drop the idea now please for the sake of our people, pollution of water/ land is already a big issue in Hawaii. Don't add to the problem.

Submitted on: 4/15/2025 8:45:36 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Georgia L Hoopes	Individual	Oppose	Written Testimony Only

Comments:

Aloha Committee Members,

I am strongly opposed to SCR136 and urge you to **NOT** move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

Don't flush our hard earned dollars down the toilet by advancing this BAD resolution!

Mahalo."

Georgia Hoopes, Kalaheo

Submitted on: 4/15/2025 9:07:02 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Oppose	Written Testimony Only

Comments:

Why waste everyone's time to have a working group looking into nuclear technology on Hawaii? If we can't find a place for a landfill where are we going to find a place to put spent nuclear fuel? Be realistic. Stick to what is feasible, realistic and possible

Submitted on: 4/15/2025 9:12:01 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Katherine Fryer	Individual	Oppose	Written Testimony Only

Comments:

I strongly oppose SB1588 SD1 to establish a Nuclear Energy Task Force. This bill is in conflict both with Hawaii's constitution, which explicitly prohibits nuclear fission power plants without legislative approval (Article XI, Section 8), and with the nuclear energy ban enacted by the County of Hawaii. These laws reflect strong public opposition to nuclear power, which would endanger our fragile island environment and everyone who lives here.

Nuclear power requires a huge investment of time and money, both in reactors and in waste containment. Spent fuel rods remain dangerously radioactive and require consistent management for thousands of years. How could the state fulfill such a commitment, and where would facilities be built? Shipping waste out of state would be a high risk operation with potential to contaminate our nearshore waters and our fisheries at sea. Storing it here until the isotopes decay would be a multigenerational effort.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax money, which would be better invested in safer options such as wind farms, solar cells and improved energy efficiency.

Submitted on: 4/15/2025 9:26:36 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Shannon Rudolph	Individual	Oppose	Written Testimony Only

Comments:

STOP WASTING OUR MONEY!!! We don't want nuclear energy in Hawai'i so we don't need a 'task force'.

This CR is ridiculous. wth?

Submitted on: 4/15/2025 10:12:07 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
mary santa maria	Individual	Oppose	Written Testimony Only

Comments:

Legislators, mahalo for reading this. I stand opposed to the approval of SCR136. The Legislature had already determined that *nuclear energy is too expensive for Hawaii, and it would set back our sustainable goals. Please do not approved bill SCR136.*

Sincerely

Submitted on: 4/15/2025 10:25:16 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Lynda Williams	Individual	Oppose	Remotely Via Zoom

Comments:

Aloha,

This is the resolution that just won't die. I don't understand why Rep Lowen keeps pushing this resolution. I fear you folks are woefully ignorant about 'advanced nuclear' reactors - THEY ARE DECADES AWAY FROM BEING VIABLE - if EVER. They are still in the testing mode. SO WHY ARE YOU PUSHING THIS RESOLUTION? It is insanely premature. Even IF - and that is a big IF - Small Modular Reactors become viable in a decade or two - we wouldn't ever want nuclear power in Hawaii becuase of the waste issues. DO NOT BELIEVE THE HYPE! These are not small safe boxes that can stay in Hawaii forever becuse THEY ARE MORE RADIOACTIVE THAN TRADITIONAL REACTORS.

There is simply no need to have a 'working group' for the feasiblity of nuclear power in Hawaii becasue the technology is decades away. The only reason to have this is to have a working group to GRIFT federal money from the DOE and perhaps personal pay offs from the Nuclear Industry for representatives willing to push this nonsense resolutions. It is a waste of time, resources and money. All of our energy should go into reliable sustainable power production like solar, wind and tidal.

I am sick and tired of having to submit testimony on the BS resolution. What is Senator Wakai getting for pushing this agenda year after year? Even he really understood nuclear power science then he would know this is a premature act so I have to conclude he is getting paid to do it. It is unethical and reprehensible.

As a physicist, educator and expert on nuclear power I am happy to come in and give a workshop on the issue or DO A DEBATE with Senator Wakai. Let's see him debate the facts about the viability and feasiblity of nuclear power in Hawaii.

Please kill this resolution and stop wasting our time and money.

Mahalo,

lynda williams

physicist, Hilo

SCR-136-HD-1 Submitted on: 4/15/2025 10:54:23 AM Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
TOM DIGRAZIA	Individual	Oppose	Written Testimony Only

Comments:

Strongly oppose!

Submitted on: 4/15/2025 11:00:00 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Diane Ware	Individual	Oppose	Written Testimony Only

Comments:

Dear Legislators,

I am strongly opposed to SCR136 and urge you to NOT move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

Don't flush our hard earned dollars down the toilet by advancing this BAD resolution!

Malama Pono for future generations,

Diane Ware

Volcano 96785 🔏



<u>SCR-136-HD-1</u> Submitted on: 4/15/2025 11:09:56 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Cory Harden	Individual	Oppose	Written Testimony Only

Comments:

Aloha legislators,

The last thing we need on an environmentlaly sensitive, earthquake and tsunmai-prone island, is nuclear power and nuclear waste. Please vote down this SCR!

mahalo,

Cory Harden, HIlo

Submitted on: 4/15/2025 11:39:55 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
arleen velasco	Individual	Oppose	Written Testimony Only

Comments:

The <u>San Onofre Nuclear Generating Station</u>, now decommissioned, faces a complex issue of radioactive waste storage. It holds 3.55 million pounds (or 1,600 metric tons) of spent nuclear fuel. While the plant has been shut down, the U.S. government's inability to establish a permanent, long-term storage facility means the waste remains on the site, raising concerns about safety and environmental risks.

Is this what you want to leave for the future generation of Hawaiians? Nuclear energy is not a solution for future energy needs. Please do not waste money on a study on an energy source that humans still do not know how to deal with the waste.

Submitted on: 4/15/2025 11:43:05 AM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Gail P. Gnazzo	Individual	Oppose	Written Testimony Only

Comments:

I oppose this bill primarily because we have negligible resources for storing or preferably getting rid of our wastes in Hawaiihere (from trash, recyclables, chemical, manemade building, housing, industrial materials and most recently toxic waste from fires.) Equally critical reasons are economic. Our cost of living is the highest in the country. We need to find more inexpensive forms of energy, supporting growth of renewable energy & utilizing wind, sun, indigenous plants & trees to heat and cool our homes, fuel our cars. & transportation, grow our food. Currently even our environmentalists are focusing on dead-end methods of dealing w pollution, climate change, clean air and water etc. Full of good intentions our solutions are still killing our world w waste. There is no where for it to go. We should learn from nature how to survive, and thrive while regenerating life and health. ife. Reduce, reuse, and recycle is not a viable MOA. There is still no where for all thes "downcycled" wastes to go. Not my idea, by the way: credit: William McDonough, architect and pioneer in eco-effectiveness. Author w Chemist Michael Braungart of the book Cradle to Cradle,

Submitted on: 4/15/2025 12:07:54 PM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ruth Robison	Individual	Oppose	Written Testimony Only

Comments:

Dear Committee on Consumer Protection and Commerce,

I would rather work on the development of geothermal enery for Hawaii.

I am strongly opposed to SCR136 and urge you to NOT move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

We are already having such an immense challenge just being able to site a landfill on Oahu; how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

Thank you for your service and for the opportunity to submit testimony.

Submitted on: 4/15/2025 12:10:16 PM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ann Pitcaithley	Individual	Oppose	Written Testimony Only

Comments:

I am vehemently opposed to SCR136 .Please stop wasting our hard earned dollars and legislative time and effort in pursuing SCR136 for the Nuclear Taskforce. I am livid that this is still on the docket . Why is Rep Lowen is pushing so hard on this resolution? I am sure there are paid lobbyists in the Nuclear Industry who are a dominating influence. It will take decades or more before this small module reactors form of nuclear energy to become available, so it is premature now to address any legislation on this matter. Wind, solar and geothermal are underutilized and are the real solution.

Submitted on: 4/15/2025 12:32:09 PM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Cheryl Ho	Individual	Oppose	Written Testimony Only

Comments:

I am **strongly opposed to SCR136** and urge you to **NOT** move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

As a Japanese-American, I am extremely fearful of the long-term impact on the residents and economy, of the disaster that occurred at the Fukushima Power Plant. I am also aware and worried about the nuclear waste storage issue, illustrated by the Runit Island Dome in the Marshall Islands. To quote from a 2020 article by Evan Lubofsky in Oceanus:

"They hadn't considered sea level rise in the 1970s when they built this," Buesseler said. "And at the current rate, the whole dome will be at least partially submerged by the end of this century." That begs the obvious question of what higher seas will mean for additional radiation flow into the Pacific. Buesseler says it's impossible to predict, but ongoing monitoring of the situation will be critical. "As long as the plutonium stays put under the dome, it won't be a large new source of radiation to the Pacific Ocean," he said. "But a lot depends on future sea-level rise and how things like storms and seasonal high tides affect the flow of water in and out of the dome. It's a small source right now, but we need to monitor it more regularly to understand what's happening, and get the data directly to the affected communities in the region so the people there have more confidence in what their levels of exposure are."

PLEASE, Legislators, seriously consider this testimony, and DO NOT ESTABLISH a task force on nuclear energy. Too many of us are opposed to spending time, energy, and money on such a group.

Sincerely,

Cheryl O. Ho, Nu'uanu

Submitted on: 4/15/2025 1:02:08 PM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
jeanne wheeler	Individual	Oppose	Written Testimony Only

Comments:

As someone who's seen the dangerous contamination of the nuclear industry in NM, from mining to power usage (also weapon development) to waste disposal - PLEASE do NOT consider a 'taskforce' to subject our precious Island to such a toxic energy system, especially when we've abundant non-toxic potential options. Please don't waste our taxpayer \$ that'd be better spent on public health (for example)! Mahalo/Aloha - JW, Pahoa

Submitted on: 4/15/2025 1:07:58 PM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Susan Bambara	Individual	Oppose	Written Testimony Only

Comments:

Please OPPOSE SCR136. We are a small tiny closed ecosystem. It should be NO-BRAINER, except by the avaricious and those with greed motives, to oppose TOXIC Energy or having nuclear energy in the State in any way, shape or form.

WE, the people you represent oppose nuclear energy. Please hear our pleas and say no to a nuclear working group because we do not need nuclear energy in this precious ALOHA State.

Thank you,

Susan Bambara, Kurtistown

Submitted on: 4/15/2025 1:10:20 PM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Janice Palma-Glennie	Individual	Oppose	Written Testimony Only

Comments:

aloha,

i am deeply, strongly opposd to SCR136 as should be every last member of this committee and legislature. the dangers and reasons are clear.

This is a poor excuse for turning to clean, safe energy sources. hawaii should NEVER embrace the use of one of mankind's most deadly and misused substances.

mahalo for voting NO ON SCR136.

Sincerely,

janice Palma-Glennie

Kailua-Kona

Submitted on: 4/15/2025 1:31:27 PM

Testimony for CPC on 4/16/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
William South	Individual	Oppose	Written Testimony Only

Comments:

Nuclear energy is never a good idea. In the future when we have perfected fusion technology, maybe. The cost for building the infrastructure and the eventual remedial. price is way more than other Green alternatives.

Submitted on: 4/15/2025 3:52:36 PM Testimony for CPC on 4/16/2025 2:00:00 PM

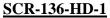


Submitted By	Organization	Testifier Position	Testify
Julie and Thomas Pasquale	Individual	Oppose	Written Testimony Only

Comments:

This is a terrible idea and a waste of taxpayer money.

This goes against Hawaii's constitution, its commitment to renewable energy, and the values of its residents.



Submitted on: 4/15/2025 4:09:50 PM

Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Chama Cascade	Individual	Oppose	Written Testimony Only

Comments:

URGENT!

PLEASE TAKE ACTION NOW!

I am strongly opposed to SCR136 and urge you to NOT move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

Don't flush our hard earned dollars down the toilet by advancing this BAD resolution!

I APPOSE 136 SCR REQUESTING THE HAWAII STATE ENERGY OFFICE TO CONVENE A NUCLEAR ENERGY WORKING GROUP TO STUDY THE FEASIBILITY OF USING ADVANCED NUCLEAR POWER TECHNOLOGIES IN THE STATE.

Mahalo,

Chama Cascade

Submitted on: 4/15/2025 4:20:51 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Donna Fischer	La'akea Permaculture Community	Oppose	Written Testimony Only

Comments:

Please don't waste our money studying nuclear power! Hawaii has abundant truly natural resources in the form of the sun, wind, and sea. Why create something that make nuclear wastes and has potential to harm everyone alive? Just doesn't make sense.

Submitted on: 4/15/2025 5:11:41 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Koohan Paik-Mander	Individual	Oppose	Written Testimony Only

Comments:

I VEHEMENTLY oppose this measure, which is a WASTE OF MONEY and only serves the powerful nuclear industry that is being viewed as the supposedly "climate-friendly" and supposedly "renewable" energy that will power Silicon Valley's dream of an AI economy (which we do not need).

NO, NO, NO-- ONE THOUSAND TIMES, NO.

I have just returned from New Mexico, which is also receiving massive pressure from Sam Altmann of Open AI and Bill Gates of Microsoft to welcome a nuclear revival. I spent time with indigenous people who have been suffering for decades from various types of cancer due to the impacts of the nuclear industry's life cycle -- mining, testing, and waste disposal. Increased sufffering is anticipated and dreaded from the planned nuclear revival, which will call for more mining and larger landfills to dump the nation's radioactive nuclear waste.

There is absolutely no way to protect the environment from the contamination that is inevitable from mining and waste disposal. The waste remains toxic and radioactive for tens of thousands of years.

Just because a mess of clowns running the White House is no reason for Hawaii to join the circus.

Stay sane. Oppose SCR 136!!!

Submitted on: 4/15/2025 5:27:45 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Mike Golojuch, Sr.	Individual	Support	Written Testimony Only

Comments:

I strongly support SCR136. We need to explore all alternative energy resources.

Submitted on: 4/15/2025 5:50:13 PM

Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Nedi McKnight	Individual	Oppose	Written Testimony Only

Comments:

Testimony Opposing SCR136

April 15, 2025

To: Chair and Members of the Committee

From: Nedi McKnight

RE: Opposition to SCR136 - Requesting the Hawaii State Energy Office to Convene a

Nuclear Energy Working Group

Aloha Chair and Committee Members,

I am writing to express my **strong opposition** to SCR136, which proposes the formation of a working group to study the feasibility of using advanced nuclear power technologies in Hawaii.

While the search for clean and reliable energy sources is a necessary and urgent pursuit, nuclear energy presents far more **risks and drawbacks** than benefits, especially in the unique context of Hawaii.

1. Environmental and Safety Risks Are Heightened in Island Contexts

Hawaii's geographic isolation and vulnerability to natural disasters—including earthquakes, tsunamis, and hurricanes—make the risks of nuclear power **disproportionately dangerous**. Even advanced nuclear technologies cannot fully eliminate the potential for catastrophic failure, which would have devastating and irreversible impacts on our limited land, fragile ecosystems, and ocean-dependent economy.

2. Unresolved Waste Management Challenges

Nuclear power inevitably produces radioactive waste that remains hazardous for thousands of years. Hawaii has no viable long-term storage solution, and transporting this waste off-island presents serious logistical, security, and environmental concerns. The lack of a permanent waste disposal infrastructure makes the pursuit of nuclear energy not only impractical but ethically irresponsible.

3. High Costs and Opportunity Loss

Advanced nuclear technologies are **extremely expensive** to develop, build, and maintain. The cost per megawatt remains significantly higher than solar, wind, and battery storage—technologies that are already well-suited to Hawaii's natural resources. Investing time and taxpayer money into a nuclear study diverts attention and resources away from proven, safer renewable energy solutions that align with Hawaii's climate goals and values.

4. Public Trust and Indigenous Rights

Hawaii has a long and painful history of land misuse and militarization, particularly impacting Native Hawaiian communities. Introducing the possibility of nuclear infrastructure reignites concerns about **sovereignty**, **environmental justice**, **and community consent**. Any exploration of nuclear power would need to answer not just technical questions but also deep ethical ones—questions that this resolution fails to address.

5. We Don't Need Nuclear to Reach Our Clean Energy Goals

Hawaii has already demonstrated leadership in renewable energy development. With abundant solar, wind, geothermal, and wave energy potential, our state can reach its 100% renewable energy target without taking on the risks of nuclear power. Studies and real-world deployments have shown that renewable systems, combined with energy storage and grid modernization, can provide reliable and sustainable energy even on isolated grids like ours.

Conclusion

Rather than exploring risky and outdated energy models, we should double down on the clean, safe, and community-supported solutions that are already within our reach. I urge the Legislature to reject SCR136 and to continue advancing Hawaii's energy future in a way that is sustainable, equitable, and aligned with our shared values of mālama 'āina and kuleana to future generations.

Mahalo for your time and consideration.

Respectfully,

Nedi McKnight

Submitted on: 4/15/2025 6:06:02 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Brodie Lockard	Individual	Oppose	Written Testimony Only

Comments:

Are you out of your minds?

Submitted on: 4/15/2025 6:06:15 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Kealakai Hammond	Individual	Oppose	Written Testimony Only

Comments:

Aloha,

I am strongly opposed to SCR136 and urge you to **NOT** move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

Don't flush our hard earned dollars down the toilet by advancing this BAD resolution!

Mahalo,

Kealakai Hammond

Honolulu, HI

Submitted on: 4/15/2025 7:16:32 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Gerald Klappert	Individual	Oppose	Written Testimony Only

Comments:

As a Physicist, having graduated from the University of Hawaii, it is my opinion that nuclear power for Hawaii is not the answer to our energy needs. There are so many drawbacks to using nuclear power that it makes no sense whatsoever. I don't understand why we would even want to study the issue, which seems more like a foot in the door to developers of nuclear power. I can only imagine the potential devastation to our coral reefs from the waste heat of a nuclear plant. If you look at nuclear power plant construction, there have been documented massive cost overruns. There have also been comparisons to other forms of energy that state that nuclear power is a far more costly form of energy than other sources of energy, such as coal, natural gas, and fuel oil. The ratepayers will definitely suffer having to absorb these costs. Nuclear power plants also present a tremendous risk due to potential hurricanes, tsunamis, volcanoes, and earthquakes, as well as terrorist threats. You only have to look at Fukushima as an example.

I believe that we are currently on the right path with solar power in this state, and incentives should be continued. We have the perfect environment for optimum use of solar energy.

Mahalo for considering my opinion about this important issue.

Submitted on: 4/15/2025 8:15:30 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Vivian S. Toellner	Individual	Oppose	Written Testimony Only

Comments:

Can you simply **SAVE THE 'AINA**, Nuclear power It is already against Hawaii law!!!

We are already having such an immense challenge just being able to site a landfills, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years? Earthquakes remember Fukushima Nuclear Accident, and so many others?

Can you simply **SAVE THE 'AINA**!!!

Stop this insanity, and Save Beautiful Hawai'i.

Hawaii Law: Const. Art. 11, § 8

No nuclear fission power plant shall be constructed or radioactive material disposed of in the State without the prior approval by a two-thirds vote in each house of the legislature.

Article 11

CONSERVATION, CONTROL AND DEVELOPMENT OF RESOURCES

CONSERVATION AND DEVELOPMENT OF RESOURCES

Section 1. For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people. [Add Const Con 1978 and election Nov 7, 1978]

https://law.justia.com/constitution/hawaii/conart11.html?fbclid=IwY2xjawJsJydleHRuA2FlbQIx MQABHlmnkmcYjpTBtQv0T6L2O34myODKLRrRmSEeJX06P9g2u6Ivd--4dIxkVatE_aem_4aGinaPgTcbNGpwNUBcMGg

Submitted on: 4/15/2025 8:21:34 PM

Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Victoria Anderson	Individual	Oppose	Written Testimony Only

Comments:

I strongly oppose SCR136, which seeks to establish a Nuclear Energy Task Force. The Energy Office has already determined that nuclear power would be too expensive. Thus, allowing SCR136 to move forward would waste our tax dollars, and risk steering Hawai'i away from our sustainable energy goals.

In addition, we are already having a huge challenge trying to site a landfill on Oahu. How then will we be able to site a nuclear waste facility that would contain lethal radioactive waste, that must be maintained and funded for at least 200,000 years?

Please don't waste our hard-earned tax dollars on this resolution!

Mahalo,

Victoria B. Anderson



Nā'ālehu, HI

Submitted on: 4/15/2025 8:25:41 PM

Testimony for CPC on 4/16/2025 2:00:00 PM



·			
Submitted By	Organization	Testifier Position	Testify
James Long	Individual	Oppose	Written Testimony Only
Comments: As a keiki o ka 'āina and kas strongly opposed to SCR13 resolution, which seeks to e resources, and misaligned withe values of its residents.	6 and urge you to NOT mo stablish a Nuclear Energy T	ve this resolution for lask Force, is unneces	ward. This ssary and a waste of
The Energy Office has alr expensive. Allowing SCR1 our state away from its susta	36 to move forward would		s , and risk steering
On top of that, if we are alreal landfill on Oahu, how would lethal radioactive waste, that 200,000 years?	d we ever be able to site a n	uclear waste facility	that would contain
Don't flush our hard earned	dollars down the toilet by a	dvancing this BAD r	esolution!
Mahalo,			
James Long			

Submitted on: 4/15/2025 9:52:11 PM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Safia Gravel	Individual	Oppose	Written Testimony Only

Comments:

OPPOSE SCR136. Keep our precious islands safe from nuclear disaster and waste. As the most isolated land mass on the planet we have a nice buffer from faraway dangers, no need to bring those here. We have plenty of natural resources that can provide energy already, we do not need or want a nuclear plant. Have we not learned from Fukushima or any other devastating nuclear disaster? We deserve better. Vote no on SCR136.

Mahalo nui loa for your foresight and consideration.

Submitted on: 4/16/2025 8:12:29 AM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Keith Neal	Individual	Comments	In Person

Comments:

The SCR136 public and legislative conversation this session has been about geothermal. The last minute 'gut and replace' with nuclear is an ugly affront to the public/legislative process.

Keith Neal

Waimea

Submitted on: 4/16/2025 8:21:29 AM Testimony for CPC on 4/16/2025 2:00:00 PM



	Submitted By	Organization	Testifier Position	Testify
S	usan Trombley	Individual	Oppose	Written Testimony Only

Comments:

I am strongly opposed to SCR136 and urge you to **NOT** move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

Don't flush our hard earned dollars down the toilet by advancing this BAD resolution!

Mahalo

Submitted on: 4/16/2025 8:45:20 AM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Kimmer Horsen	Individual	Oppose	In Person
Comments: Chairs, and Representatives,			
I am strongly opposed to SC resolution, which seeks to es resources, and misaligned withe values of its residents.	tablish a Nuclear Energy T	ask Force, is an unnec	cessary waste of
The Energy Office has alread to move forward would wast sustainable energy goals.	•	•	_
On top of that, if we are alreal landfill on Oahu, how would lethal radioactive waste, that 200,000 years?	we ever be able to site a n	uclear waste facility th	nat would contain
Don't flush our hard earned of Mahalo.	lollars down the toilet by a	dvancing this BAD re	solution!

Kimmer Bighorse

Submitted on: 4/16/2025 9:32:05 AM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Ronald Fujiyoshi	Individual	Oppose	Written Testimony Only

Comments:

I feel I must speak out in opposition to SCR 136.

I agree with many Pacific nations that have voted to be nuclear-free. This relates to this resolution as well.

The Hawaiian Kingdom took a strong stand to be a "Neutral" nation. This was to clearly to disengage in anything military against another nation. Anything nuclear slides us into being open to nuclear aligns us with nuclear power. This identifies us with nuclear weapons, of which I am completely opposed.

Please do not think of sliding into this dark place.

Mahalo for allowing me to testify!

Submitted on: 4/16/2025 9:48:58 AM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Bryan Revell	Individual	Oppose	Written Testimony Only

Comments:

I am strongly opposed to SCR136 and urge you to NOT move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents. Not one venture to date has lowered our costs as consumers, in fact our electric rates have climbed exponentially since Geothermal and Solar , wind operations. Our rates are the highest in the world. Plus the desecration of our lands with no benefits to its people.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

Don't flush our hard earned dollars down the toilet by advancing this BAD resolution!

Submitted on: 4/16/2025 9:51:08 AM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Melinda Healani Sonoda- Pale	Individual	Oppose	Written Testimony Only

Comments:

Nuclear energy will bring with it another level of problems and will be detrimental to public health.

Submitted on: 4/16/2025 10:38:12 AM Testimony for CPC on 4/16/2025 2:00:00 PM



_	Submitted By	Organization	Testifier Position	Testify
	Nanea Lo	Individual	Oppose	Written Testimony Only

Comments:

Hello,

I am strongly opposed to SCR136 and urge you to NOT move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

Don't flush our hard earned dollars down the toilet by advancing this BAD resolution!

me ke aloha 'āina, Nanea Lo Mō'ili'ili, HI 96826 Sierra Club of Hawai'i Executive Committee Member Board Member, Hawai'i Workers Center Kanaka Maoli/Lineal Descendant of the Hawaiian Kingdom

Submitted on: 4/16/2025 11:56:48 AM Testimony for CPC on 4/16/2025 2:00:00 PM



Submitted By	Organization	Testifier Position	Testify
Angela Natrasevschi	Individual	Oppose	Written Testimony Only

Comments:

I am strongly opposed to SCR136 and urge you to NOT move this resolution forward. This resolution, which seeks to establish a Nuclear Energy Task Force, is an unnecessary waste of resources, and misaligned with Hawaii's constitution, its commitment to renewable energy, and the values of its residents.

The Energy Office has already stated nuclear power would be too expensive. Allowing SCR136 to move forward would waste our tax dollars, and risk steering our state away from its sustainable energy goals.

On top of that, if we are already having such an immense challenge just being able to site a landfill on Oahu, how would we ever be able to site a nuclear waste facility that would contain lethal radioactive waste, that according to scientists, must be maintained and funded for at least 200,000 years?

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Submitted on: 4/16/2025 11:59:39 AM Testimony for CPC on 4/16/2025 2:00:00 PM



_	Submitted By	Organization	Testifier Position	Testify
	Lana Brodziak	Individual	Oppose	Written Testimony Only

Comments:

I am strongly opposed to SCR136 and urge you to **NOT** move this resolution forward.

"Adavanced nuclear" reactors are decades away from being viable. They are still in the testing mode. **SO WHY ARE YOU PUSHING THIS RESOLUTION?**

Allowing SCR136 to move forward would **waste our tax dollars**, and risk steering our state away from its sustainable energy goals. There is simply no need to have a working group for the feasibility of nuclear power in Hawaii.

Don't use hard earned taxpayer dollars for this wasteful resolution!

Mahalo