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Testimony of
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before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, March 18, 2025
10:45 AM
State Capitol, Conference Room 325 and Videoconference

Providing **Comments** on
HR 202

URGING THE STATE TO REJECT ENERGY SOURCES FOUND TO BE HARMFUL OR DESTABILIZING TO OUR CLIMATE SYSTEM AND ENVIRONMENT AND TO COMMIT TO RENEWABLE ENERGY AND THE VALUES OF HAWAII'S RESIDENTS.

Chair Lowen, Vice Chair Perruso, and Members of the Committee, the Hawai‘i State Energy Office (HSEO) respectfully provides comments on HR 202, which requests that “state authorities refrain from committing financial regulatory assistance toward [liquified natural gas] LNG or any other energy sources found to be harmful or destabilizing to our climate system and environment”, and further “calls upon the state government to protect the people of Hawai‘i by implementing the recommendations by scientists to ensure no new fossil fuel projects are invested in.”

HSEO supports the intent of this resolution to protect Hawai‘i from utilizing energy sources found to be harmful or destabilizing to our climate system and environment and underscores the importance of reducing Hawai‘i’s reliance on fuels that are detrimental to the climate. However, HSEO is concerned about this resolution's narrowly focused language, which ignores the extremely harmful climate and economic impacts of the status quo fossil fuel mix that predominates Hawai‘i’s electricity power generation, especially on O‘ahu. The narrow evaluation advocated in this measure lacks the transparency and objectivity of a comprehensive evaluation of alternatives to be considered to achieve affordability, reliability, and reduced carbon emissions. HSEO

stresses that the state's continued reliance on low-sulfur fuel oil (LSFO), currently responsible for about sixty-nine percent of energy generation on O‘ahu,[1] perpetuates the dirtiest of fuel options available to Hawai‘i with lifecycle greenhouse emissions far exceeding alternatives including natural gas – a reality that is entirely ignored in the proposed HCR 210.

HSEO is specifically concerned about misleading and erroneous statements in HRC 210 pertaining to: 1) investment in new energy generation infrastructure purported to undermine efforts to move forward on clean energy goals; 2) disparaging LNG while ignoring cost and carbon impacts of low sulfur fuel oil and biofuels which are the current and prescribed power generation fuels under HECO’s Integrated Grid Plan; and 3) the reference to Robert Howarth, as “one of the world’s premier methane scientists.”

In Hawai‘i today, it is a well-documented fact that power plants that produce the bulk of the islands’ energy are aging and well past their useful life. There is consensus among the Public Utilities Commission, HSEO, the Hawai‘i Natural Energy Institute, and the Consumer Advocate that upgrades to thermal generation are necessary for grid reliability. Hawaiian Electric has also acknowledged the need for thermal generation improvements with four approved Stage 3 Firm Projects. HSEO asserts that without these improvements, rolling blackouts will likely become more common as generation reserves continue to decline.

The Alternative Fuel, Repowering, and Energy Transition Study (“Fuel Study”) published in January of 2025 by the HSEO states that planned thermal capacity projects are critical to ensure grid reliability and provide improved powerplant efficiency; however, "the Stage 3 thermal projects and likely the IGP RFP thermal projects, will result in one of two outcomes: either (1) higher electricity prices if biofuels are available and the PUC approves their costs, or (2) the continued reliance on liquid oil-based fossil fuels, such as Low Sulfur Fuel Oil or ultra-low sulfur diesel.”[2] The Fuel Study further found that LNG was the only fuel immediately available in the near term that would

[1] Hawaiian Electric 2024 Renewable Portfolio Standard Status Report to the Public Utilities Commission. Docket 2007-0008 Renewable Portfolio Standards Law Examination. Filed February 10, 2025.
[2] Hawaii State Energy Office (2025) Alternative Fuel, Repowering, and Energy Transition Study https://energy.hawaii.gov/alternative-fuels-repowering-and-energy-transition-study/

result in both cost and lifecycle greenhouse gas emissions savings when evaluating LNG as a transition fuel to be completely phased out by 2045. The assumptions underlying the Fuel Study ensured compliance of the existing Renewable Portfolio Standard (RPS) law and interim targets, fully consistent with the intent of HCR 210 to completely phase out energy sources found to be harmful to our climate and in the near-term switch to a fuel that is *less* harmful than the existing fuels used.

A critical component of the Fuel Study is the lifecycle greenhouse gas analysis methodology underlying the evaluation of fuels. The Fuel Study acknowledged recent high-quality research and new technology measurements, which have found fugitive methane emissions from natural gas production to be higher than previously estimated by the Environmental Protection Agency (EPA).[3] These reports are legitimate causes for concern. Even in consideration of these facts, HSEO's analysis was consistent with multiple peer-reviewed scientific journal articles, which found that these higher-than-expected leakage rates **do not** negate the emissions benefits of switching from LSFO and diesel to natural gas. These collective findings are deeply at odds with the unsubstantiated assertions about LNG in HCR 210.

Regarding the referenced study by Robert Howarth on natural gas, HSEO notes that this work has been contested and critiqued by the scientific community as an outlier among hundreds of scientific studies and is rife with errors.[4]

HSEO refers to the existing laws of the Hawai‘i Clean Energy Initiative that have effectively protected the climate and the environment in Hawai‘i since 2009, as intended by this resolution. These laws include the state's RPS (HRS §269-91), the Hawai‘i Public Utilities Commission's (PUC) duty to evaluate lifecycle greenhouse gas emissions for combustion projects (HRS §269-6), and the state's zero emission clean economy target (HRS §225P-5). HSEO respectfully advises that policy decisions be rendered on merit rather than rhetoric, balancing all the economic, environmental, and

[3] Hawai‘i State Energy Office (2025). Lifecycle Greenhouse Gas Emissions – Technical Documentation. Alternative Fuel, Repowering, and Energy Transition Study. https://energy.hawaii.gov/wp-content/uploads/2025/01/3-Lifecyle-Greenhouse-Gas-Emissions-Documentation.pdf

[4] Messinger, J. (2024, July 30). *A major paper on liquified natural gas emissions is riddled with errors*. The Breakthrough Institute. https://thebreakthrough.org/issues/energy/a-major-paper-on-liquified-natural-gas-emissions-is-riddled-with-errors

climatic costs and benefits. Finally, HSEO asserts that first removing oil price volatility and ultimately eliminating fossil fuel use remain priorities of the state to meet its statutory responsibilities, which HSEO is dedicated to pursuing.

Thank you for the opportunity to testify.