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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, March 18, 2025
9:20 AM
State Capitol, Conference Room 325 and Videoconference

Providing Comments on
SB 1588, SD1

RELATING TO NUCLEAR ENERGY.

Chair Lowen, Vice Chair Perruso, and Members of the Committee, the Hawai‘i State Energy Office (HSEO) offers comments on SB 1588, SD1, which requires an interim report to the Legislature prior to the convening of the 2026 legislative session and requires a final report forty days prior to the convening of the 2027 legislative session.

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.”[1]

As a technical matter, advanced 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. SMRs can be built in relatively small physical footprints, can have reduced capital investment over full-scale conventional

[1] [1] Hawai‘i State Constitution. https://lrb.hawaii.gov/constitution/.

nuclear plants, and can provide incremental power generation at sizes ranging from tens of megawatts up to 300 megawatts.

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 believes the formation of a nuclear energy task force 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 Hawaii’s transition away from fossil fuel dependence.”

Therefore, HSEO requests that the creation of a nuclear task force 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 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.

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[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.