

HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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Testimony of SCOTT J. GLENN, Chief Energy Officer

before the HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, March 17, 2022 9:00 AM State Capitol, Conference Room 325 & Videoconference

COMMENTS SB 2535, SD2 RELATING TO ENERGY.

Chair Lowen, Vice Chair Marten and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on SB 2535, SD2, which establishes the number of miles from the shore of a main Hawaiian island where offshore wind turbines may be sited. The SD2 leaves blank the minimum distance from the shore that an offshore wind turbine may be sited and inserts an effective date of July 30, 2075, to encourage further discussion.

HSEO believes offshore wind could play an important role in helping the island of Oʻahu and the State of Hawaiʻi achieve 100% renewable energy generation. Oʻahu's limited land mass and high energy demand make it challenging to achieve electricity independence without off-island resources, based on what we currently know about Oʻahu's renewable energy resource potential.

HSEO appreciates the SD2 leaves blank the number of miles from the shore that an offshore wind turbine must be sited and inserts a future effective date to encourage further discussion. HSEO believes much more analysis and discussion are needed before establishing an offshore wind setback by law. Establishing a minimum setback for offshore wind requires analysis to identify all the impacts, potential mitigations and their effectiveness based on distances from the shore and turbine sizes. HSEO initiated actions to inform this discussion including:

- Requesting the U.S. Bureau of Ocean Energy Management (BOEM) to work with the National Renewable Energy Laboratory to publish a report to inform the cost and feasibility of developing a floating offshore wind project in Hawai'i at various locations off O'ahu. This report was published in October 2021.¹
- Requesting BOEM to work with the Pacific Northwest National Laboratory
 (PNNL) to deploy a lidar buoy off Oʻahu in the summer of 2022 for one year to
 gather ocean environment data to inform offshore wind potential and collect other
 marine data. The solicitation to deploy this buoy was issued by PNNL on
 February 7, 2022, and closes on March 15, 2022.² If deployed, data from this
 buoy would be published through PNNL's Lidar Buoy Program webpage.³
- Developing offshore wind visualization simulations from the shores of O'ahu and Moloka'i.

It would be appropriate to also consider the benefits and tradeoffs at various locations, distances, and depths at the time the energy is anticipated to be needed, based on the costs, energy needs, technologies, and mitigation measures available at the time.

Thank you for the opportunity to testify.

¹ The Cost and Feasibility of Floating Offshore Wind Energy in the O'ahu Region (boem.gov)

² PNNL : ASP : View Solicitation

³ Lidar Buoy Program | PNNL