Testimony of
SCOTT J. GLENN, Chief Energy Officer

before the
SENATE COMMITTEE ON JUDICIARY

Thursday, March 3, 2022
9:45 AM
Via Videoconference

COMMENTS
SB 2535 SD1
RELATING TO ENERGY.

Chair Rhoads, Vice Chair Keohokalole and Members of the Committee, the Hawai‘i State Energy Office (HSEO), offers comments on SB 2535 SD1, which establishes the number of miles from the shore of a main Hawaiian island where offshore wind turbines may be sited. The SD1 leaves blank the minimum distance from the shore that an offshore wind turbine may be sited.

HSEO believes offshore wind could play an important role in helping the island of O‘ahu and the State of Hawai‘i achieve 100% renewable energy generation. O‘ahu’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 O‘ahu’s renewable energy resource potential.

HSEO appreciates the amendments in this SD1 version of the bill leaving blank the number of miles from the shore that an offshore wind turbine must be sited. 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 to deploy a lidar buoy off O‘ahu in the summer of 2022 for one year to gather ocean environment data to inform offshore wind potential. Data from this buoy would be published through PNNL’s webpage.²

- 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.

² [Lidar Buoy Program | PNNL](https://www.pnnl.gov/lidar-buoy-program)