Testimony of 
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before the
SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM and
COMMITTEE ON WATER AND LAND

Friday, February 11, 2022
3:10 PM
State Capitol, Conference Room Number 224 & Videoconference

COMMENTS
SB 2535
RELATING TO ENERGY.

Chairs Wakai and Inouye, Vice Chairs Misalucha and Keith-Agaran, and Members of the Committees, the Hawai‘i State Energy Office (HSEO) offers comments on SB 2535, which requires offshore wind turbines to be sited no closer than twelve miles from the shore of a main Hawaiian island.

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 believes much more discussion and analysis 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 Molokai

  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 Lidar Buoy Program | PNNL