



**TESTIMONY BEFORE THE SENATE COMMITTEE
ON JUDICIARY**

S.B. 2535, S.D. 1

Relating to Renewable Energy

March 3, 2022

9:45 a.m., Agenda Item #1
via Videoconference

Rebecca Dayhuff Matsushima
Vice President, Resource Procurement
Hawaiian Electric Company, Inc.

Chair Rhoads, Vice Chair Keohokalole, and Members of the Committee,

My name is Rebecca Dayhuff Matsushima and I am testifying on behalf of Hawaiian Electric Company, Inc. with comments on S.B. 2535 S.D. 1, Relating to Energy, which establishes the number of miles from the shore of a main Hawaiian island where offshore wind turbines may be sited.

Hawaiian Electric believes that in order to reach Hawaii's 100% renewable portfolio standard and ensure energy resilience, all viable renewable options, including offshore resources, should be considered in long-term planning efforts, and has identified offshore wind as a potential resource in its long-term plans. Hawaiian Electric notes that the Bureau of Ocean Management ("BOEM") is currently reviewing three lease requests from two different developers for offshore wind projects in Hawai'i. From the publicly available data made available by BOEM, the three proposed sites appear to be sited 9 miles, 12 miles, and 17 miles from the coast. Any setbacks established by this bill could affect the development of these projects.

Allowing for the potential incorporation of offshore windfarms would help

diversify and increase Hawaiian Electric's renewable portfolio as we move toward 100% renewable energy sources and reducing Hawaii's carbon footprint and emissions.

Thank you for this opportunity to comment on S.B. 2535. S.D.1.

TESTIMONY OF
JAMES P. GRIFFIN, Ph.D.
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII

TO THE
SENATE COMMITTEE ON
JUDICIARY

March 3, 2022
9:45 a.m.

Chair Rhoads and Members of the Committee:

MEASURE: S.B. No. 2535, SD1

TITLE: RELATING TO ENERGY.

DESCRIPTION: Establishes the number of miles from the shore of a main Hawaiian island where offshore wind turbines may be sited. (SD1)

POSITION:

The Public Utilities Commission (“Commission”) offers the following comments for consideration.

COMMENTS:

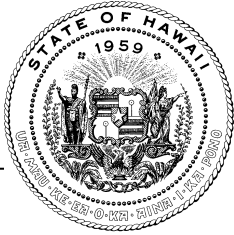
The Commission appreciates the stated intent of this measure to promote the transition to cheaper, cleaner energy, reduce the impact of fossil fuel generation on communities currently hosting fossil fuel plants, and ensure the protection of coastal and nearshore areas. The Commission believes it is important to maximize the benefits of the clean energy transition for Hawaii’s communities, ratepayers, and environment.

The Commission also believes that future projects should go through all appropriate government approval and community engagement processes. The Commission notes that a statutory boundary, depending on its terms and specified distance from shore, may exclude potential proposals prior to these governmental approval and community engagement processes running their course.

Should this measure be adopted, the Commission will ensure that the state’s electric utilities comply with its provisions.

S.B. No. 2535, SD1
Page 2

Thank you for the opportunity to testify on this measure.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

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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.

¹ <https://www.boem.gov/sites/default/files/documents/regions/pacific-ocs-region/environmental-science/BOEM-2021-070.pdf>

² [Lidar Buoy Program | PNNL](#)

LATE

Hawai'i State Senate
Committee on the Judiciary
Decisionmaking
March 3, 2022
9:45 am
Videoconference

TESTIMONY ON S.B. 2535, S.D.1 RELATING TO ENERGY

Aloha Chair Rhoads, Vice-Chair Keohokalole, and Honorable Members of the Committee on Judiciary. I am writing in support of the intent of S.B.2535, S.D. 1, which would establish a buffer zone between the coast of O'ahu and any wind turbine for any proposed floating offshore wind projects. We respectfully ask that any minimum setback requirements be informed by studies focused on impacts and the effectiveness of potential mitigation measures.

My name is D. Noelani Kalipi, and I serve as the Chief Strategy Officer for Progression Energy, a renewable energy company specializing in floating offshore wind. Progression Energy is pursuing the development of a floating offshore wind farm off the coast of O'ahu. Our Progression Energy Hawai'i team consists of Hawai'i residents who have been actively involved in the Hawai'i Clean Energy Initiative and Hawai'i's efforts to reach its goal of 100% renewable energy generation.

Floating offshore wind is a vital clean energy resource for achieving the 100% renewable energy and decarbonization mandates while meeting the electricity needs of O'ahu. This island cannot reach 100% with solar and battery projects alone and will need other technology like offshore wind to achieve that goal. The recent study published by the National Renewable Energy Lab in October 2021 found that floating offshore wind is feasible for Hawai'i and can be one of the most economical energy sources in the next ten years. The study also found that 2030 is likely the earliest that an offshore wind project could be constructed in Hawai'i.

Our team members have been assessing the feasibility offshore wind for O'ahu for the past nine years. Stakeholder and community participation in this process is absolutely vital if an offshore wind project is ever going to reach the operational stage in Hawai'i. Our development model focuses on collaboration with community members and stakeholders throughout the project's life, including the planning, construction, and operation phases to ensure that this energy solution works well for the people and the 'āina of Hawai'i.

Many factors determine the location of a successful floating offshore wind project. These include but are not limited to: wind resource, ocean depth, ocean bottom (bathymetry), vessel traffic (surface vessels and submarines), ecosystems (marine mammal habitats, fish habitats, coral reefs, avian species, etc.), cultural considerations, viewshed analysis, stakeholder input, and transmission distance. For that reason, selecting a site for a project requires a detailed multi-factored planning process that overlays all of these important elements to determine the

best location. A wind energy project needs to be close enough to shore to benefit from the more robust wind resource, reasonable water depth, and transmission distance. There are also factors that need to be considered to ensure minimal impact on marine mammals and ocean ecosystems. It is challenging to predict at this early stage what the appropriate distance should be given the number of factors that still need to be studied.

We support efforts by the Hawaii State Energy Office to better inform future actions regarding the establishment of minimum setback requirements for offshore wind projects to identify impacts and the effectiveness of potential mitigation measures. The appropriate distance should be informed by science and studies.

However, should this Committee determine that a minimum setback must be identified at this time, we respectfully request that the minimum setback not exceed ten nautical miles, which is equivalent to 11.5 miles. As the distance from shore increases, the wind resource gets lower, the ocean is deeper, and the cables need to be longer, which increases the cost of energy for a project, resulting in a higher price of electricity – something that none of us want.

Getting an offshore wind farm to the operational phase will require extensive community and stakeholder participation and compliance with rigorous regulatory and environmental permitting requirements. We look forward to this opportunity. We appreciate and support the intent of this bill. At the same time, we hope to have the flexibility to develop a project that meets the needs of Hawai'i's residents and communities.

SB-2535-SD-1

Submitted on: 3/1/2022 5:17:16 PM

Testimony for JDC on 3/3/2022 9:45:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Gerard Silva	Individual	Oppose	No

Comments:

We the people do not want this CARP in Hawaii!!

You put this up and you will on your Way out!!!

SB-2535-SD-1

Submitted on: 3/2/2022 7:23:32 AM

Testimony for JDC on 3/3/2022 9:45:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
tristin manuel	Individual	Oppose	No

Comments:

Aloha,

My name is Tristin Manuel, a Kailua Resident & Native Hawaiian and I am strongly Opposed to Offshore Wind Turbines due to its enviromental impact on our delicate coral reef.

thanks for your time,

Tristin MRM Manuel