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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

Thursday, February 15, 2024
1:00 PM
State Capitol, Conference Room 229 & Videoconference

In Support of
SB 3195

RELATING TO RENEWABLE ENERGY.

Chair DeCoite, Vice Chair Wakai, and members of the Committee, the Hawai'i State Energy Office (HSEO) supports SB 3195, that would revise a section of Chapter 171 of the Hawaii Revised Statutes (HRS) having to do with the process for leasing of state lands. The proposed change would simplify the definition of "renewable energy producer" in HRS section 171-95 that authorizes the Board of Land and Natural Resources to perform certain transactions without public auction.

HSEO believes that (1) clarifying the definition would be helpful, and (2) the anticipated need for renewable energy extends beyond the electricity sector, since the state's decarbonization goals include the reduction in greenhouse gases from fuels used in the transportation sector, utility gas, and nonregulated fuel gases.

The statutory language, as it currently exists, is somewhat complex. The proposed revision, referencing HRS 269-91, provides welcome consistency between statutes.

The contents of the definitions are shown side-by-side in the table below for comparison.

HRS Section 171-95(c)	From HRS Section 269-91
<p>For the purposes of this section, "renewable energy producer" means:</p> <ol style="list-style-type: none"> (1) Any producer or developer of electrical or thermal energy produced by wind, solar energy, hydropower, geothermal resources, landfill gas, waste-to-energy, ocean thermal energy conversion, cold seawater, wave energy, biomass, including municipal solid waste, biofuels or fuels derived from organic sources, hydrogen fuels derived primarily from renewable energy, or fuel cells where the fuel is derived primarily from renewable sources that sell all of the net power produced from the demised premises to an electric utility company regulated under chapter 269 or that sells all of the thermal energy it produces to customers of district cooling systems; provided that up to twenty-five per cent of the power produced by a renewable energy producer and sold to the utility or to district cooling system customers may be derived from fossil fuels; or (2) Any grower or producer of plant or animal materials used primarily for the production of biofuels or other fuels; provided that nothing herein is intended to prevent the waste product or byproduct of the plant or animal material grown or produced for the production of biofuel, other fuels, electrical energy, or thermal energy, from being used for other useful purposes. 	<p>For the purposes of this part: "Renewable energy" means energy generated or produced using the following sources:</p> <ol style="list-style-type: none"> (1) Wind; (2) The sun; (3) Falling water; (4) Biogas, including landfill and sewage-based digester gas; (5) Geothermal; (6) Ocean water, currents, and waves, including ocean thermal energy conversion; (7) Biomass, including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste; (8) Biofuels; and (9) Hydrogen produced from renewable energy sources.

HSEO recommends a slight adjustment to ensure that district cooling and sea water air conditioning are able to continue as recognized technologies eligible for these provisions, consistent with [Act 205, Session Laws of Hawaii 2007](#). Using renewable resources to directly provide energy-efficient cooling (i.e. not having to be converted into electricity first and then into cooling) is a potentially powerful means of reducing energy imports and avoiding emissions. Since “sea-water air-conditioning district cooling” is recognized in HRS sections 269-91 and 269-96 as an efficiency technology, this change is consistent with the other reference to HRS section 269-91.

Since there are already two paragraphs, (1) and (2), a simple approach that would retain district cooling would be to add a third paragraph, as follows:

"(3) Any provider of district heating or cooling services utilizing renewable energy."

The paragraph would then (without Ramseyer marking) read as follows:

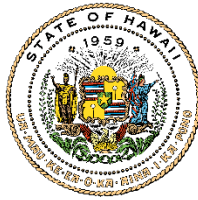
- (c) For the purposes of this section, "renewable energy producer" means:
- (1) Any producer or developer of renewable energy as defined in §269-91 that sell the net power produced from the demised premises; or
 - (2) Any grower or producer of plant or animal materials used primarily for the production of biofuels or other fuels; provided that nothing herein is intended to prevent the waste product or byproduct of the plant or animal material grown or produced for the production of biofuel, biogas, hydrogen, or other fuels from being used for other useful purposes; or
 - (3) Any provider of district heating or cooling services utilizing renewable energy.

HSEO defers to the appropriate agency on the administration of this measure.

Thank you for the opportunity to testify.

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA**

P.O. BOX 621
HONOLULU, HAWAII 96809

**Testimony of
DAWN N. S. CHANG
Chairperson**

**Before the Senate Committee on
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

**Thursday, February 15, 2024
1:00 PM**

State Capitol, Conference Room 229 & Videoconference

**In consideration of
SENATE BILL 3195
RELATING TO RENEWABLE ENERGY**

Senate Bill 3195 proposes to amend the definition of “renewable energy producer” in section 171-95, Hawaii Revised Statutes (HRS) to allow renewable energy producers to sell to entities other than an electric utility company regulated under chapter 269, HRS. **The Department of Land and Natural Resources (Department) strongly supports this measure.**

As written, to be eligible for a directly negotiated lease under section 171-95, HRS, a renewable energy producer is required to sell all of the net power produced from the demised premises to an electric utility company regulated under chapter 269, HRS. The Department believes that this statute is outdated and in need of modernization. Evolving renewable energy technology now includes far more than electricity generated by solar panels and governing statutes should reflect that new reality. For example, a renewable energy project could produce energy in a form other than electricity, such as hydrogen, that would not involve the sale of electricity or “wheeling,” which Hawaiian Electric and other testifiers have expressed concern about in their testimony on the House companion of this bill, House Bill 2020.

Removing the requirement that power be sold to an electric utility company would provide the Department with greater flexibility to generate revenue to support its mission by expanding the pool of potential applicants eligible for leases via direct negotiation rather than the cumbersome and costly auction process.

Mahalo for the opportunity to testify on this measure.

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KANAKA'OLE
FIRST DEPUTY

DEAN D. UYENO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

TESTIMONY OF
LEODOLOFF R. ASUNCION, JR.
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII

TO THE
SENATE COMMITTEE ON
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

Thursday, February 15, 2024
1:00 p.m.

Chair DeCoite, Vice Chair Wakai, and Members of the Committee:

MEASURE: S.B. No. 3195

TITLE: RELATING TO RENEWABLE ENERGY.

DESCRIPTION: Amends the definition of "renewable energy producer" in section 171-95, HRS, to allow renewable energy producers to sell to entities other than an electric utility company regulated under chapter 269, HRS.

POSITION:

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

COMMENTS:

The Commission appreciates the intent of this measure to expand the market for renewable energy in order to complement the State's efforts to achieve its renewable energy goals. The Commission recognizes the potential advantages of a more diverse energy market that would promote the production of clean electricity and understands that producers of renewable energy play an important role in the State's transition to renewable energy.

The Commission observes that the measure provides consistency across statutes by aligning the definition of "renewable energy" in HRS § 171-95 with the definition in Chapter 269. The Commission observes that the two definitions are currently substantially similar and supports this modification.

The measure also proposes to remove language that renewable energy producers must sell to an electric utility (page 3, lines 11 – 18). While HRS § 171-95 relates to the sale, lease, and other actions by the Board of Land and Natural Resources related to public lands, the removal of the referenced language creates confusion as to whether wheeling (or sale of electricity to entities other than a utility) is allowed by this measure, which is also stated as an intent of this measure in the preamble of the bill. The commission would appreciate language be inserted into the bill that clarifies that the bill does not authorize wheeling.

While this measure, if enabling wheeling, would serve to increase the number of allowed purchasers and provide more flexibility and options for sellers and buyers in the renewable energy market, as addressed in this and related measures concerning wheeling, the Commission underscores the need to carefully identify and examine the policies and procedures required to implement retail wheeling. As the Commission commented in a related measure, S.B. No. 3194, “electricity wheeling requires analysis of many complex and interrelated issues to ensure reliability and cost-effectiveness, such as interconnection, availability of transmission and distribution capacity, appropriate rates and rate design, back-up power requirements, and impacts on non-participating ratepayers.”

The Commission suggests that an investigatory docket would be an appropriate forum to explore whether implementing retail wheeling in Hawaii is feasible and in the public interest. The investigatory docket process allows the opportunity for stakeholders to intervene and collaborate on determining the appropriate rates and procedures for retail wheeling.

Thank you for the opportunity to testify on this measure.



**Hawaiian
Electric**

**TESTIMONY BEFORE THE SENATE COMMITTEE ON
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**

SB 3195

Relating to Renewable Energy

Thursday, February 15, 2024

1:00 PM

State Capitol, Conference Room 229

James Abraham
Associate General Counsel
Hawaiian Electric

Dear Chair DeCoite, Vice Chair Wakai, and Members of the Committee,

My name is James Abraham and I am testifying on behalf of Hawaiian Electric offering comments on SB 3195, Relating to Renewable Energy.

The purpose of SB 3195 is “to allow renewable energy producers to sell to entities other than the electric utility,” which is also known as “wheeling” of electricity. Hawaiian Electric appreciates the intent of the bill to try to enable more renewable development on State land; however, there are important equity concerns that should be considered prior to focusing such development for purposes of wheeling rather than to aid the State as a whole in achieving its renewable goals. Regulatory policies must take into account these equity considerations and establish policy and technical requirements that minimize cost shifting and consider the impacts on non-wheeling customers.

Hawaiian Electric agrees with the Public Utilities Commission’s (“PUC”) suggestion of opening a new investigatory docket to explore whether implementing wheeling in Hawaii is feasible and in the public interest. Specifically, we believe that such a docket should examine intragovernmental wheeling (i.e., wheeling from one government agency to another) as an initial step to consider the appropriate balance of interests and priorities

and address among other things risk of potential significant cost and equity impacts to non-wheeling customers. Such a docket would allow the PUC, the Consumer Advocate, Hawaiian Electric and other stakeholders to establish a foundation for a balanced wheeling model which could be used to develop similar programs for a wider range of customer-participants. This bill, however, could allow energy developed on leased State land to be sold from one private entity to another rather than being focused on benefits for the public.

In order to effectively balance many important objectives and produce sustainable success in Hawaii's unique renewable energy environment, a wheeling program must be designed to consider and address the following key principles:

- **Promote customer choice by increasing options.** We seek collaboration to establish and coordinate specific services between utilities and customers needed to lower bills, increase renewable energy, and energy efficiency.
- **Safety is paramount.** Operating an electric grid is complex and should be the responsibility of the utility without undue interference to ensure public safety and the safety of utility crews.
- **Reliability of the electric system.** The reliability and resilience of the public utility's electric grid must not be compromised.
- **Aiding renewable energy.** Wheeling programs should be designed and implemented to help increase the use of renewable energy for the benefit of the whole community, not just the few who can afford it.
- **Cohesion with existing renewable laws.** A new wheeling model in Hawaii must recognize existing laws, such as the utilities' 100% renewable portfolio standard, and ensure that wheeling does not interfere with or defeat these goals.
- **Equity.** Burden on other customers should be balanced with the benefits, including the opportunity cost for non-wheeling customers. Regulatory policies must minimize cost shifting, along with establishing other policy and technical requirements.
- **Avoid unintended consequences.** Hawaii's regulatory framework is sophisticated and intended to serve many state and customer objectives. In

fostering achievement of certain objectives, care must be applied to avoid unintentionally undermining other priority objectives.

Hawaiian Electric has strong concerns about the feasibility of addressing and balancing the above key principles in a full retail wheeling model and believes that a reasonable first step would involve the PUC's examination of intragovernmental wheeling, which may have less impacts on non-participants and the community. As currently drafted, this bill would allow State land to be developed to generate renewable energy that could be wheeled for the benefit of a private entity. By removing the limitation that renewable energy developed on State land be sold to the public utility, potential equity concerns arise as that land will no longer be available for renewable RFPs that lower costs and increase renewable energy utilization for the broader utility customer base.

We welcome continued discussion of how wheeling concepts can be adapted to fit the realities of the Hawaii energy system, with the understanding that the Company must play a primary role in structuring such wheeling transactions to ensure safety, reliability, and financial equity. Indeed, technology and the energy market have evolved to the point where Hawaiian Electric now enables customers to enjoy many of the benefits of wheeling through existing programs such as shared solar and the Microgrid Services Tariff. We must address the State's energy future as a whole and be cautious not to simply adopt mainland solutions ill-fit for Hawaii, especially those used in larger grids with large manufacturing and commercial loads.

Hawaiian Electric appreciates the Committee's consideration of its comments on SB 3195. Thank you for this opportunity to testify.



Email: communications@ulupono.com

SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT & TOURISM
Thursday, February 15, 2024 — 1:00 p.m.

Ulupono Initiative offers comments on SB 3195, Relating to Renewable Energy.

Dear Chair DeCoite and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food, renewable energy and clean transportation choices, and better management of freshwater resources.

Ulupono offers comments on SB 3195, which amends the definition of “renewable energy producer” in section 171-95, HRS, to allow renewable energy producers to sell to entities other than an electric utility company regulated under chapter 269, HRS.

Based on the House EEP hearing last week on this measure’s companion bill HB 2020, there are conflicting views of how this measure is interpreted. On one hand, this measure seems to unlock lease flexibility for the Department of Land and Natural Resources (DLNR) to enter into direct negotiation with renewable energy producers or developers. On the other hand, this measure’s purpose clause on Page 2 lines 15-16 states “to allow renewable energy producers to sell to entities other than the electric utility” and further removes the requirement that the renewable energy producer or developer sell the power produced to an electric utility company, thus opening up an interpretation that allows for wheeling. We believe that if the intent of this measure is solely to accommodate the former interpretation, then language in the purpose clause must be changed. We recommend the following amendment on page 2, Section 1, lines 12-17:

“Accordingly, the purpose of this Act is to repeal the constraints of section 171-95, Hawaii Revised Statutes, and the narrow definition of “renewable energy producer”, to allow renewable energy producers to [~~sell to entities other than the electric utility, in furtherance of the State’s renewable energy goals~~] **directly negotiate leases with the department of land and natural resources.**”

Currently, language in this bill raises several concerns regarding the concept of electricity wheeling as it pertains to Hawai'i as an island state and its potential implications to our

Investing in a Sustainable Hawai'i

electricity markets, grid stability, and overall energy policy. If this bill does not seek to establish a wheeling policy on DLNR lands, then language should be adjusted to meet the bill's true intention.

Additionally, we suggest adding a disclaimer language in this bill to reinforce this legislative intent on page 3, section 1, to read as:

~~“(1) Any producer or developer of [electrical or thermal] renewable energy as defined in §269-91 [produced by wind, solar energy, hydropower, geothermal resources, landfill gas, waste-to-energy, ocean thermal energy conversion, cold seawater, wave energy, biomass, including municipal solid waste, biofuels or fuels derived from organic sources, hydrogen fuels derived primarily from renewable energy, or fuel cells where the fuel is derived primarily from renewable sources] that sells [all of] the net power produced from the demised premises [to an electric utility company regulated under chapter 269 or that sells all of the thermal energy it produces to customers of district cooling systems, provided that up to twenty-five per cent of the power produced by a renewable energy producer and sold to the utility or to district cooling system customers may be derived from fossil fuels],~~
provided that this section does not allow for the wheeling of electricity;”

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs



INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL UNION 1260 EMPOWERING THE PACIFIC

SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

HEARING DATE: Thursday, February 15, 2024
TIME: 1:00 p.m.
PLACE: State Capitol
Conference Room 229

RE: In Support of Senate Bill 3326, Relating To Renewable Energy

Aloha Honorable Chair DeCoite, Vice Chair Wakai, and Members of the Committee;

The International Brotherhood of Electrical Workers Local 1260 (IBEW 1260) would like to respectfully **opposes** Senate Bill 3195.

IBEW 1260 is comprised of approximately 3,000 members representing Hawaii's electric utility companies as well as government service contracts and media personnel throughout Hawaii, Guam, and Wake Island. Our members are a diverse local workforce of dedicated, highly skilled, and trained individuals working 24 hours a day, 7 days a week, to generate, transmit, and distribute electricity throughout Hawai'i and to ensure the reliability of this precious resource.

IBEW 1260 respectfully **opposes** Senate Bill 3195 which amends the definition of "renewable energy producer" in section 171-95, HRS, to allow renewable energy producers to sell to entities other than an electric utility company regulated under chapter 269, HRS.

The electric utility and infrastructure that Hawaiian Electric provides is vital to our community, and to our members and their families. As a local company, tracing its roots back to Hawai'i's monarchy, HECO has been a generous corporate partner and philanthropic contributor to our community and provides a valuable and sustainable careers to many of Hawai'i's local residents.

IBEW 1260 is concerned that SB 3195 may jeopardize the reliability and resiliency of Hawai'i's electrical grid and the overall ability of utilities to provide a stable source of electricity to its customers, and to ensure the safety and welfare of the public and the utility worker. Additionally, SB 3195 may place an unfair financial burden on ratepayers who can least afford it. IBEW 1260 supports efforts to provide electric utilities with the tools to protect the safety and welfare of the public and of the utility worker, and believes this measure, although well-intended, runs counter to those objectives. Therefore, IBEW 1260 respectfully opposes this measure and supports continued robust discussion at the PUC level.

Mahalo for the opportunity to testify on this important matter.

Statement of
Brigadier General Stanley J. Osserman Jr. (USAF Ret.), President
Tigershark, LLC
Before the
Senate Committee on Energy, Economic Development and Tourism
15 February 2024
1:00 pm
State Capitol Conference Room #229
In consideration of
SB3195
Relating to Renewable Energy

Chair DeCoite

4 February 2024

Vice Chair Wakai and Distinguished Committee Members:

I stand in strong support of this bill.

As the former director of the Hawaii Center for Advanced Transportation Technologies (HCATT; 2013 to 2019), Hawaii Department of Business, Economic Development and Tourism (DBEDT), I continue to serve our state by promoting clean, renewable energy solutions. This testimony is NOT being given for compensation of any kind by any corporate or commercial entity. I am presenting to you today as a concerned “Life-Long” citizen of the State of Hawaii with extensive professional experience in energy systems, retail and wholesale business, military matters, international commerce, aviation, construction, maritime operations, and public safety, among others. My goal is to help our government leaders make good strategic choices.

Although Climate Change and Carbon Sequestration are the “hot topics” today, we are not managing the transition away from fossil fuels well, at all, and the fact is, over a decade of focus on Climate Change, and we are nowhere near where we should be in terms of reducing use of fossil fuels in Hawaii on our grid or for transportation! The irony is that we need some fossil fuels to make the transition but the emphasis on “zero fossil fuels, NOW” makes the transition impossible because of the huge scale of the task and, the economic impact, and the time it takes to grow new industries. We will simply not be able to “switch” to clean energy and electricity all at once. In addition to this challenge, the longer it takes us to transition, the more expensive fossil fuel products (gas, diesel, aviation fuel, plastics, and thousands of other products that are by-products of making fuel) will get.

Simply put, we Need to have some power producers dedicate power strictly to producing the new, sustainable fuels without the electric utility and P.U.C involved (because there is only one customer, the hydrogen or synthetic fuel producer, customer). In 2011 I visited the Chevron refinery in Campbell Industrial Park. I asked the facility manager what his HECO bill averaged to run all the equipment? He said, “We don’t use HECO power. We have our own

generators, and we have our own fuel!” If Chevron can do it, we certainly should be letting companies trying to help move Hawaii forward in clean/sustainable energy the same opportunity we gave Chevron!

SB3195 can help us speed up the necessary and complex growth in clean firm electrical power to make clean hydrogen for fuel cell electric transportation for aviation and maritime use, synthetic liquid “bridge fuels” for aircraft engines, vehicles and gas turbines (in ships and even power plants). Private power producers have been hamstrung by complex PPA’s and cumbersome PUC processes to develop distributed power generation and using wheeling of electricity to help Hawaii address the complex challenges that lie ahead. SB3195 is an important start.

Brigadier General, Stanley J. Osserman Jr. (USAF Ret.)

President, Tigershark, LLC