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Testimony of the Department of Commerce and Consumer Affairs

**Before the
Senate Committee on Commerce and Consumer Protection
Wednesday, February 23, 2022
9:30 AM
Via Videoconference**

**On the following measure:
S.B. 2171, SD1, RELATING TO ENERGY**

Chair Baker and Members of the Committee:

My name is Dean Nishina, and I am the Executive Director of the Department of Commerce and Consumer Affairs' (Department) Division of Consumer Advocacy. The Department offers comments on this bill.

The purpose of this bill is to authorize independent generators of renewable energy to wheel the renewable electricity they produce to users of renewable energy under administrative rules established by the Public Utilities Commission (Commission).

This SD1 version amends the bill by inserting language that protects consumers from substandard services and other potential adverse impacts; allowing the Commission to implement the provisions of this measure by administrative rule or order; and, delaying the establishment of retail wheeling rules and the submission deadline for the legislative report for one year.

Wheeling has been discussed on the subject of multiple dockets before the Commission. In Docket No. 03-0371, wheeling came up in the context of the investigation of distributed generation in Hawaii. In Docket No. 2007-0176, Instituting

Proceedings to Investigate the Implementation of Intragovernmental Wheeling of Electricity, the Commission opened the proceeding, in part to address the issues raised in Docket No. 03-0371. In Docket No. 2014-0192, Instituting a Proceeding to Investigate Distributed Energy Resource Policies, the Department raised the need to revisit issues related to properly unbundling costs and establishing clear pricing signals to facilitate distributed generation, including wheeling. Also, the Commission more recently initiated a Proceeding to Investigate Establishment of a Microgrid Services Tariff by issuing Order No. 35566 on July 10, 2018, opening Docket No. 2018-0163, which may address whether a microgrid will rely on the electric utility's transmission and distribution facilities to transmit energy and will involve wheeling.

Wheeling raises challenges to ensure that terms and conditions, including the prices associated with using utility facilities, are fairly set. The Department supports careful examination of a fair tariff to use utilities' transmission and distribution systems. Adequate care must be exercised to ensure that this tariff does not result in the following: (1) under-compensating the utility for costs associated with the transmission/distribution infrastructure used to wheel the energy, because under-compensation would shift costs to other customers; (2) over-charging the renewable energy buyer and thereby creating a disincentive for distributed generation; (3) creating certain rules or provisions that may be discriminatory, such as allowing only certain customers to use or rely on a particular service; and (4) that both customers participating in a wheeling tariff as well as non-participating customers are protected and not adversely affected by any such wheeling arrangement.

The Department notes and appreciates how this SD1 version would add a section 269-_(e) largely in line with the Department's previous testimony recommending provisions to require customer protections. Also, the Department believes that the additional year for the Commission to establish, by rule or order, the policies and procedures necessary to implement retail wheeling would make accomplishing that somewhat more realistic. However, on the whole, the Department still respectfully suggests that the Legislature consider allowing the Commission to: (1) continue its consideration of issues associated with designing and implementing tariffs that will be

foundational to the evolving energy industry, including wheeling; and (2) complete its ongoing proceedings, which should address wheeling. Establishing a firm date to address the wheeling issue will potentially tax the limited resources that the Department, the Commission, and other stakeholders and could result in refocusing those resources away from other ongoing complex and time-consuming proceedings, such as several power purchase agreement proceedings. The Department appreciates the Legislature's interest and offers that a substantive resolution, that includes annual reporting on the progress on developing technical guidelines and tariffs to enable wheeling, may be more appropriate.

Thank you for the opportunity to testify on this bill.



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COMMITTEE ON COMMERCE AND CONSUMER PROTECTION
Senator Rosalyn H. Baker, Chair
Senator Stanley Chang, Vice Chair

DATE: Wednesday, February 23, 2022
TIME: 9:30 AM

SB 2171, SD1 RELATING TO ENERGY

COMMENTS

Aloha Chair Baker, Vice Chair Chang, and Members of the Committee

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 52 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

Life of the Land has participated in several transmission-related regulatory proceedings over the past quarter century including the Kamoku-Pukele (Wa`ahila Ridge) 138-kV Transmission Line, the East Oahu Sub-transmission line, Big Wind with a MECO-HECO undersea transmission line, microgrids, discussions on offshore wind, Smart Meters, Smart Grids, Integrated Grid Planning, Non-Wire Alternatives, etc., and served on the PUC's Reliability Standards Working Group and HECO's Resilience Working Group.

LIFE OF THE LAND HAS REVERSED ITS POSITION from enthusiastically supporting wheeling to recognizing that there are limited cases where it can be implemented, but any attempt to impose wheeling today with a much wider application must address a wide range of issues involving definitions, fair pricing, location, interconnection, time of production, discriminatory policies, and impacts to other customers.

Life of the Land shares the concerns raised by HECO, the Consumer Advocate, the State Energy Office, and the Public Utilities Commission,

The HECO grids of today are not the grids of five or ten years ago, nor are Hawai'i grids like continental grids. Tens of thousands of rooftop systems, centralized and distribute storage, demand response, virtual power plants, non-wire alternatives (NWAs), etc., have created a new and evolving normal.

The Public Utilities Commission is considering limited wheeling involving specific applications including distribute energy resources (DER) and microgrid operations during utility grid failures.

Wheeling on a broader scale could be, but should not be, rushed through with mandated deadlines for rule making.

Wheeling will impact Performance-Based Regulation, the procurement and operations of Dispatchable Renewable Generation, and Energy Reserve Margin (ERM) utilizing sequential Monte Carlo production cost simulations is a planning criteria.

The Commission has wisely engaged in investigation proceedings that enabled stakeholder working groups to explore possibilities and to develop consensus. If wheeling is to be encouraged, it should follow the same path.

Furthermore, the Commission should receive additional funding so that the wheeling proceeding does not cut into funding currently being allocated to more critical policies, programs, and applications.

In conclusion, wheeling is a side show. If the Legislature deems that it is an important issue to pursue, it should allocate the staffing and money necessary to achieve wheeling in an open stakeholder driven process.

Mahalo

Henry Curtis
Executive Director



SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

February 23, 2022, 9:30 A.M.

Video Conference

TESTIMONY IN SUPPORT OF SB 2171 SD1

Aloha Chair Baker, Vice Chair Chang, and Committee members:

Blue Planet Foundation **supports SB 2171**, which directs the Public Utilities Commission to implement rules that would authorize independent generators of renewable energy to “wheel” the renewable electricity they produce. This bill can ensure that the state will adopt mechanisms to increase competition within Hawai‘i’s electrical markets, expand customer choice, and provide pathways for renewable energy innovation and generation.

Blue Planet Foundation’s mission is to clear the path for 100% clean energy and to make Hawai‘i a role model for a just and sustainable transition to our low-carbon future. To that end, we support the ongoing shift of electric utilities in Hawai‘i from a centralized producer-distributor to a decentralized distribution manager—i.e. the utility will control and manage the wires of the new intelligent grid but more of the power can come from independent, clean energy sources.

Retail wheeling is a step toward this new model for the utility, where independent power producers can enter into agreements with end users and effectively “rent” the transmission and distribution capability from the utility. Such an arrangement would open the doors to innovation and encourage more to invest in clean energy development.

For example, some renewable energy projects in Hawai‘i are restricted from selling their power at certain times of the day due to oversupply or the inability of the utility to reduce the generation from a fossil fuel power plant. If retail wheeling were allowed, the renewable energy project could find a potential customer for their excess energy—perhaps at a much-discounted rate. A large resort might be interested in purchasing lower cost electricity for ice storage for air conditioning. Or someone may wish to sell lower-cost renewable energy to an electric vehicle (EV) charger aggregator to charge EVs. This would have multiple benefits for the grid, clean energy power producers, and customers. What’s more, retail wheeling can be a useful tool to promote community-based microgrids and bring us closer to our vision for a participatory and resilient grid of the future where residents and communities can produce and share energy.

Thank you for the opportunity to provide testimony.

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Testimony Before the Senate Committee on Commerce and Consumer Protection

By David Bissell
President and Chief Executive Officer
Kaua'i Island Utility Cooperative
4463 Pahe'e Street, Suite 1, Līhu'e, Hawai'i, 96766-2000

Wednesday, February 23, 2022; 9:30 am
Conference Room #229 & Videoconference

Senate Bill No. 2171 SD1 - RELATING TO ENERGY

To the Honorable Senator Rosalyn H. Baker, Chair, Stanley Chang, Vice Chair and Members of the Committee:

Kaua'i Island Utility Cooperative (KIUC) is a not-for-profit utility providing electrical service to more than 34,000 commercial and residential members.

KIUC opposes this measure.

Over the past 10 years, KIUC has significantly increased its renewable generation. In 2020, KIUC's energy mix included 67% renewable: leading the state. Renewable production is expected to be similar for 2021. For the past three years, KIUC has operated the Kaua'i electric grid at 100% renewable for thousands of consecutive hours on sunny days.

Previous wheeling proposals limited the practice to moving electricity between government entities. We are concerned that this bill would expand wheeling opportunities to a broad array of entities. The use of utility infrastructure that is maintained by KIUC ratepayers for the benefit of a few is of significant concern.

The uniqueness of our island grids must be taken into account when considering such proposals. Kaua'i has a relatively small grid, and KIUC has been successful in securing long-term power purchase agreements for utility-scale renewable projects. Solar facilities and battery storage systems connected to utility-scale solar facilities account for roughly two-thirds of our renewable production and are among our lowest priced energy sources. We believe that utility-scale projects best serve our members, as they deliver electricity at prices that smaller, privately-owned projects could not achieve.

Allowing parties other than the franchised utility provider to wheel renewable energy likely would result in higher utility rates for the remaining customers as the most attractive load profiles would be exposed to "cherry picking" under an open wheeling environment. While it is theoretically possible to develop a rate system to allow for recovery of certain stranded costs associated with wheeling.

Developing such a cost structure is complicated and the benefits of allowing wheeling are unlikely to merit its development, particularly for a small cooperative such as KIUC. Even with a new rate structure, the franchise utility remains required to serve all loads without the ability to deny service to less attractive customers. Accordingly, wheeling runs the risk of creating a “have” and “have not” system of energy service where the majority would end up paying more in utility bills for the benefit of a few.

KIUC has a clear path to more than 80% renewable generation a full two decades ahead of the state mandate for 100% renewable. We aggressively pursue cost effective renewable energy sources and firmly believe wheeling is unnecessary to reach our targets. We believe the best way to reach 100% renewable in 2045 is to continue to pursue utility-scale projects while individual members employ behind-the-meter solutions to reduce their energy costs and consumption.

Mahalo for your consideration.



**Hawaiian
Electric**

**TESTIMONY BEFORE THE SENATE COMMITTEE ON
COMMERCE AND CONSUMER PROTECTION**

SB 2171, SD 1

Relating to Energy

Monday, February 23, 2022

9:30 am

State Capitol, Conference Room 229 & Videoconference

James Abraham
Associate General Counsel, Legal Department
Hawaiian Electric Company, Inc.

Chair Baker, Vice Chair Chang, and Members of the Committee:

My name is James Abraham and I am testifying on behalf of Hawaiian Electric Company respectfully **opposing** SB 2171, SD 1.

Hawaiian Electric supports energy programs that benefit all customers and we are committed to working with customers to determine the best ways to meet their energy needs. Generally, wheeling enables electricity to be generated at one location and used at a separate location that could be nearby or even a significant distance away, and can be operationally and economically complex. 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, Microgrid Services Tariff and Green Tariff Pilot (awaiting regulatory approval).

Previous versions limited wheeling to the movement of energy between government entities, potentially offering benefits to taxpayers and contributing to the state's renewable energy goals. This bill represents a significant expansion of wheeling to include private, for-profit enterprises that could use the transmission and distribution system that was built and is maintained by utility ratepayers. Hawaiian Electric

appreciates this bill's attempt to seek innovative ways to reduce fossil fuel dependency by bringing on more renewable energy, but the Company has concerns with applying a full retail wheeling model to Hawai'i. Isolated island electric grids in Hawai'i are vastly different from the bulk power system of the mainland, where the wheeling model proposed in this bill originated. Unlike California and many other places we're compared to, we can't plug into the mainland grid, either to buy or sell electricity to neighboring utilities or for reliability purposes.

Making full retail wheeling available would potentially exacerbate financial and geographic equity issues by encouraging the construction of renewable energy projects on one part of the island to supply power exclusively to customers on another part of the island, using Hawaiian Electric's transmission and distribution system to connect them. Even assuming the Company is compensated for this use, this arrangement could shift costs to customers who do not benefit from wheeling arrangements yet must still pay to maintain the grid. It could also aggravate community concerns that have emerged around the siting of renewable energy projects, especially if the benefits accrue only to end users located miles away.

In order to succeed 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 safety of all customers and utility crews.

- **Reliability of the electric system.** The stability and reliability 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.
- **Equity.** Burden on other customers should be balanced with the benefits, including the opportunity cost for non-wheeling customers. Wheeling should not increase costs for non-participating customers. Regulatory policies must minimize cost shifting, along with establishing other policy and technical requirements.

We welcome continued discussion of how wheeling concepts can be adapted to fit the realities of the Hawai'i 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. We must address the State's energy future as a whole and not with techniques that simply sound reasonable as stand-alone concepts, especially those used in larger grids on the mainland with large manufacturing and commercial loads.

Hawaiian Electric supports programs that will aid in continued progress towards 100% RPS by 2045, but has concerns that wheeling, as proposed, may hinder rather than support such progress and aggravate community concerns. Inclusive, thoughtful policies that work for Hawaii's unique energy environment are necessary to move us all forward together to a renewable future in Hawai'i.

Hawaiian Electric appreciates the opportunity to testify on SB 2171, SD 1.

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

TO THE
SENATE COMMITTEE ON
COMMERCE AND CONSUMER PROTECTION

February 23, 2022
9:30 a.m.

Chair Baker and Members of the Committee:

MEASURE: S.B. No. 2171, SD1

TITLE: RELATING TO ENERGY.

DESCRIPTION: Authorizes independent generators of renewable energy to wheel the renewable electricity they produce to users of renewable energy under administrative rules established by the Public Utilities Commission. (SD1)

POSITION:

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

COMMENTS:

The Commission supports this measure’s intent to encourage the production of clean energy and reduce Hawaii’s dependence on fossil fuels.

The Commission notes that implementing retail wheeling would likely be an intensive process involving stakeholder consultation, research, rulemaking, and other regulatory actions. The Commission appreciates the amendments made by the Committee on Energy, Economic Development, and Tourism to change the implementation deadline to December 31, 2023, to change the reporting deadline to no later than twenty days prior to the convening of the regular session of 2024, and to allow the Commission to establish retail wheeling either by rule or order.

Thank you for the opportunity to testify on this measure.

SB-2171-SD-1

Submitted on: 2/21/2022 3:14:04 PM

Testimony for CPN on 2/23/2022 9:30:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Keith Neal	Individual	Support	No

Comments:

I support SB2171.

This legislation/regulation must:

-Allow/permit independent 'clean' (appropriately defined) power producers to the grid generally or to a given user/customer.

-Set appropriate Transmission and Distribution (i.e.T&D) charges for utility owned grid services.

Such wheeling energy market rules require thoughtfulness and attention. The wheeling energy market in the Atlantic NE performs effectively/efficiently. However, the Texas energy market has had several catastrophic failures.

This measure's intent to encourage the production of clean energy and reduce Hawaii's dependence on fossil fuels. Rules of such an energy market 'wheeling' must be established. Incentives should be given to producers that have additional storage capability.

Respectfully submitted

Keith Neal