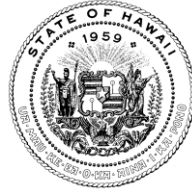


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**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
OFFICE OF THE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS**

NADINE Y. ANDO
DIRECTOR | KA LUNA HO'OKELE

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DEAN I HAZAMA
DEPUTY DIRECTOR | KA HOPE LUNA HO'OKELE

Testimony of the Department of Commerce and Consumer Affairs

**Before the
House Committee on Consumer Protection & Commerce
Thursday, April 4, 2024
2:00 p.m.
Conference Room 329**

**On the following measure:
S.B. 3194, S.D. 2, H.D. 1, RELATING TO ENERGY**

Chair Nakashima and Members of the Committee:

My name is Michael Angelo, 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: (1) authorize independent generators of renewable energy to wheel the renewable electricity they produce to users of renewable energy under policies and procedures established by the Public Utilities Commission (Commission), should the Commission determine through an investigatory docket that retail wheeling is in the public interest; and (2) require the Commission to report to the Legislature.

The Department appreciates the bill's intent to advance the development of renewable energy resources in light of our State's clean energy goals. Since 2007, the Commission has evaluated issues regarding wheeling and, at that time, it was found to be complex and require considerable resources. However, new options have become

available. The Commission considered the issue of wheeling as part of microgrids in Docket No. 2018-0163. In that docket, the scope of investigating a microgrid services tariff has expanded to include wheeling utilizing the electric utility's infrastructure, this would essentially require a form of wheeling. In addition, aspects of wheeling have been discussed as part of other dockets, such as Docket No. 2019-0323.

The Department appreciates that this version of the bill provides the Commission time (until December 31, 2025) to initiate and complete a new investigatory proceeding, in which the Commission can apply some of the work that the Commission has already initiated as noted above, to determine whether retail wheeling is in the public interest. With respect to any proceeding on wheeling, the Department believes that an appropriate wheeling tariff should: (1) enable users to wheel energy from one site to another in a manner that does not adversely affect other customers or the grid; and (2) fairly compensate the utility for using their transmission and distribution facilities to enable wheeling, so that other customers do not have to unfairly subsidize wheeling activities.

Thank you for the opportunity to testify on this bill.

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

TO THE
HOUSE COMMITTEE ON
CONSUMER PROTECTION AND COMMERCE

April 4, 2024
2:00 p.m.

Chair Nakashima, Vice Chair Sayama, and Members of the Committee:

MEASURE: S.B. No. 3194, SD2, HD1

TITLE: RELATING TO ENERGY.

DESCRIPTION: Authorizes independent generators of renewable energy to wheel the renewable electricity they produce to users of renewable energy under policies and procedures established by the Public Utilities Commission, should the Public Utilities Commission determine through an investigative docket that retail wheeling is in the public interest. Requires the Public Utilities Commission to report to the Legislature. Takes effect 7/1/3000. (HD1)

POSITION:

The Public Utilities Commission (“Commission”) supports this measure.

COMMENTS:

The Commission appreciates the intent of this measure to promote increased renewable energy production. The Commission supports examination of diverse measures that would promote the production of clean electricity and understands that generators of renewable energy play an important role in the State’s transition to renewable energy.

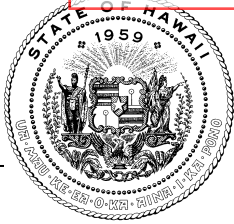
The Commission supports this measure, as opening an investigatory docket is the appropriate forum to develop a sufficient record to determine whether retail wheeling is in the public interest before implementing appropriate policies and procedures to enable retail wheeling. The Commission notes that electricity wheeling requires analysis of many

complex and interrelated issues, including reliability and cost-effectiveness, interconnection, availability of transmission and distribution capacity, appropriate rates and rate design, back-up power requirements, and impacts on the utility and non-participating ratepayers. The Commission appreciates that these issues are included in the measure and believes that these issues provide a robust initial scope for an investigation into retail wheeling. With feedback from stakeholders, the Commission would build on these issues to develop a carefully scoped statement of issues and would set and maintain a procedural schedule taking into account that wheeling is already being discussed in a limited fashion in other Commission dockets. The investigatory docket process allows the opportunity for stakeholders to intervene and collaborate on determining the appropriate rates and procedures for retail wheeling.

As noted, the Commission has previously explored and is currently exploring issues related to compensation for renewable energy generators that address issues similar to wheeling and that could support development of a wheeling tariff. The Commission previously investigated intragovernmental wheeling to a limited extent in Docket No. 2007-0176, which closed in 2019 and led to the refined focus on microgrids, a form of distribution-level wheeling being explored in Docket No. 2018-0163. Additionally, the Commission has been exploring compensation for small-scale customer generators in the distributed energy resources (“DER”) docket, Docket No. 2019-0323; has established policies and procedures for shared energy projects and agreements at various scales in the community-based renewable energy (“CBRE”) docket, Docket No. 2015-0389; and is looking at rate impacts to non-participants in such programs in the energy equity and justice docket, Docket No. 2022-0250. These previous and ongoing investigations would be reflected in the scope of an investigatory docket focused on retail wheeling.

Given the existing efforts related to retail wheeling and the legislative directive regarding the importance of examining retail wheeling, the Commission believes it is feasible to determine whether retail wheeling is in the public interest, and commits to do so before submission of the report to the Legislature twenty days prior to the convening of the 2026 regular session, as well as implement appropriate policies and procedures, shortly thereafter.

Thank you for the opportunity to testify on this measure.



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LATE

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Thursday, April 4, 2024
2:00 PM
State Capitol, Conference Room 329 and Videoconference

Providing Comments on
SB 3194, SD2, HD1

RELATING TO ENERGY.

Chair Nakashima, Vice Chair Sayama, and members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on SB 3194, SD2, HD1, that (1) sets a deadline of December 31, 2025 for the public utilities commission (PUC) to determine whether retail wheeling is in the public interest; (2) if the PUC determines that wheeling is in the public interest, directs that policies and procedures be established to implement retail wheeling; (3) removes language pertaining to wheeling from the paragraph in the definition of "public utility;" and (4) requires the PUC to submit a report of its findings and recommendations to the legislature prior to the convening the 2026 legislative session.

HSEO agrees that wheeling is an appropriate topic for consideration, evaluation and decision-making. As a ratemaking matter, wheeling can have deep and varied impacts to ratepayers and energy consumers and involves many of the pricing, location, interconnection, and time of transmission issues under consideration in proceedings such as the distributed energy resource policies¹ and performance-based regulation² dockets.

¹ Docket No. 2019-0323, <https://puc.hawaii.gov/energy/der/>

² Docket No. 2018-0088, <https://puc.hawaii.gov/energy/pbr/>

HSEO notes that, while the long-time sentiment in Hawai'i³ has been that “wheeling should be addressed at a later time,”⁴ the urgency to reduce and ultimately eliminate the harmful economic impacts of oil price volatility in the transportation and electricity sector makes careful evaluation and consideration of wheeling timely and prudent. Shared solar programs are examples of wheeling that have served the public interest throughout Hawai'i and provided value to ratepayers since passage of the underlying law permitting them in 2015.

Due to the importance and complexity of the topic⁵ among other urgent issues to be decided, particularly in the aftermath of the Maui wildfires, HSEO recommends that the PUC be given discretion to determine the appropriate regulatory sequence and timing.

Thank you for the opportunity to testify.

³ Docket No. 2007-0176, opened in 2007, was limited to the wheeling of electricity between governmental entities and did not encompass retail wheeling. That docket was suspended on December 8, 2008, to “allow for the conservation of limited resources.” Since many of the interconnection, control, and technical questions were the same, discussion moved to the Reliability Standards Working Group, part of the Feed-in Tariff docket (Docket No. 2008-0273) and has continued since then. The many topics, from power generation (intermittent, firm, dispatchable, in-fill, excess, renewable, emissions); interconnection (location, timing, value, cost, technical feasibility), line capacity (timing, capacity factors, limits, losses, heating, transformers, prioritization, congestion pricing, expansion, location, circuit limits, voltage support), use (time of use, customer class, ratepayer impacts, demand response, aggregator services) have been discussed, quantified, and sometimes set aside for future evaluation in subsequent dockets.

⁴ Hawaiian Electric, Docket No. 2018-0163, Microgrid Working Group ... February 10, 2021, footnote 20: “...as a general matter, the Commission believes retail wheeling will likely require additional discussion after the filing deadline and as such, this issue should be addressed at a later time...”

⁵ Energy Law Journal, https://www.eba-net.org/wp-content/uploads/2023/02/14_25EnergyLJ1612004.pdf

LATE



HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

April 2, 2024 at 2:00 PM
Room 329

TESTIMONY IN SUPPORT OF SB 3194 SD2 HD1

Aloha Chair Nakashima, Vice Chair Sayama, and Committee members:

Blue Planet Foundation **supports SB 3194 SD2 HD1**, which directs the Public Utilities Commission to consider the public interest of “retail wheeling” through an investigatory docket with the potential to authorize independent generators of renewable energy to wheel the electricity they produce. This bill can help to ensure the state is considering 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 is a Hawai‘i-based nonprofit organization committed to help Hawai‘i cut its carbon emissions and avoid the worst impacts of climate change. Through our advocacy for renewable energy, energy efficiency, and clean transportation, we seek to make our communities stronger, our energy more secure, our environment healthier, and our economy more robust.

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 testify in support of this measure.

LATE



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Testimony of the Hawaii Solar Energy Association (HSEA) Regarding SB3194 SD2 HD1, Relating to Energy, Before the House Committee on Consumer Protection and Commerce

Thursday, April 4, 2024

Aloha Chair Nakashima, Vice Chair Sayama, and committee members,

The Hawaii Solar Energy Association (HSEA) **supports SB3194 SD2 HD1**, which authorizes independent energy generators to engage in retail wheeling and requires the Public Utilities Commission to establish, by rule or order, policies and procedures to implement retail wheeling if deemed in the public interest.

HSEA members include the majority of locally owned and operated solar and renewable energy companies doing business in the state of Hawaii along with leading global cleantech manufacturers and service providers that invest and sell in our market. We employ thousands of residents in diverse green economy jobs and advocate for policies that help Hawaii achieve critical climate and resilience goals by enabling residents and businesses to invest in and benefit from the transition to clean energy.

Hawaii needs a diverse portfolio of renewable energy assets from a variety of sources and at a variety of scales. With proper procedures and rules, retail wheeling offers an attractive solution that can bring significant benefits to all Hawaii's ratepayers. As we look to rebuild after the disastrous Lahaina wildfires, retail wheeling in conjunction with microgrids, community-based renewable energy, and distributed generation could provide a relatively low-cost solution for resilient and clean power. And as we endeavor to transition all of Hawaii's electric grids away from fossil fuels, we need to think creatively and look at a wider array of options.

Thank you for providing the opportunity to testify in **support of SB3194 SD2 HD1**.

Respectfully,

/s/ Rocky Mould

Rocky Mould
Executive Director



LATE

Email: communications@ulupono.com

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Thursday, April 4, 2024 — 2:00 p.m.

Ulupono Initiative offers comments with concerns on SB 3194 SD2 HD1, Relating to Energy.

Dear Chair Nakashima 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 with concerns on SB 3194 SD2 HD1, which authorizes independent generators of renewable energy to wheel the renewable electricity they produce to users of renewable energy under policies and procedures established by the Public Utilities Commission (PUC), should the PUC determine through an investigatory docket that retail wheeling is in the public interest.

While we applaud legislators' willingness to consider all possible solutions, Ulupono shares several concerns regarding the concept of electricity wheeling as it pertains to Hawai'i as an island state and its potential implications to our electricity markets, grid stability, and overall energy policy.

Private wheeling raises significant equity concerns, as it allows companies and other private entities to effectively buy up renewable energy projects (or the energy from such projects) that could otherwise, if purchased by the utility, benefit all ratepayers and the broader public interest. This is especially the case currently when utility-scale solar energy is being contracted at roughly half the cost of oil-fired electricity.

Ulupono's concerns around electricity wheeling also stem from its potential adverse effects on our energy market, the stability of our power grid, and the overarching goals of our energy policy. The practice of wheeling, particularly in the unique context of Hawai'i's isolated island grids, which lack interconnectivity, is ill-suited. Hawai'i's distinct challenges, such as limited land availability and high land costs, further complicate the matter. Unlike in the continental United States, where competition among independent power producers across state lines can be beneficial, wheeling in Hawai'i could

Investing in a Sustainable Hawai'i

unintentionally lead to a reduction in affordable renewable energy options accessible to all grid-connected consumers. In real terms, the beneficiaries of wheeling would be the customers lucky enough to gain access to a private power agreement, at the expense of those who cannot. The customers left out of these agreements would bear an increased share of legacy costs and dwindling access to lower-cost renewable projects.

Moreover, wheeling presents intricate challenges in grid management, potentially undermining the stability and reliability of the power grid. The increased movement of electricity through different grid areas could cause congestion and complicate the real-time balancing of energy supply and demand. Retail wheeling may in fact exacerbate our energy costs by increasing grid operating costs. As noted by the National Regulatory Research Institute. “[i]f the electric transmission and distribution systems are not designed for the purpose of wheeling large and frequent quantities of power across the system, extensive use for wheeling could necessitate costly additions to the system.”¹

Although electricity wheeling is intended to encourage competition and reduce energy costs, it is crucial to contemplate its broader implications, including those on grid stability, investment in infrastructure, market equity, and the complexity of regulatory frameworks. UluPono earnestly urges the Legislature to deliberate thoroughly on these issues and to consider the potential negative repercussions of electricity wheeling on our energy markets and infrastructure. We believe collective efforts should be directed toward formulating policies that guarantee a stable, fair, and sustainable energy future for all.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

¹ See [Overview of Issues Relating to the Retail Wheeling Electricity](https://ipu.msu.edu/wp-content/uploads/2016/12/Costello-Overview-of-Issues-Relating-94-09-May-94-1.pdf), The National Regulatory Research Institute, May 1994, at 58. <https://ipu.msu.edu/wp-content/uploads/2016/12/Costello-Overview-of-Issues-Relating-94-09-May-94-1.pdf>



LATE

**Testimony to the Committee on Consumer Protection & Commerce
April 4, 2024, 2:00 PM
VIA Video Conference & Conference Room 329, Hawaii State Capitol**

SB 3194 SD2 HD1

Chair Nakashima, Vice Chair Sayama , and Members of the Committee,

Hawaii Clean Power Alliance (HCPA) supports SB 3194 HD1, which 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, should the Public Utilities Commission determine that retail wheeling is in the public interest. Requires the Public Utilities Commission to report to the Legislature.

Hawaii Clean Power Alliance is a nonprofit alliance organized to advance and sustain the development of clean energy in Hawaii. Our goal is to support the state's policy goal of 100 percent renewable energy by 2045. We advocate for utility-scale renewable energy, which is critical to meeting the state's clean energy and carbon reduction goals.

Hawaii bears the burden of the highest energy costs in the country, putting hardship on ratepayers. With only one entity that controls the timing and procurement of large-scale renewable energy, the potential generation of more renewable energy is stifled. This bill addresses these regulatory barriers and can help drive rates down with increased competition. As demonstrated by the addition of more providers in the airline and telecommunications industries, costs will decrease.

The unscheduled lack of supply of energy generation resulting in rolling black outs most recently on Oahu and the Big Island are stark reminders that our electric supply needs to increase through procurement of more renewable energy generation.

This measure, which allows generation from one area to supply demand in another area, permits what has been allowed extensively across the country. In turn, the ability to "wheel" electricity from one area to another will inevitably foster new technologies such as microgrids and clean, sustainable transportation. It may incent more companies who are ESG-minded to oprn businesses here adding to our economic diversification.

Additionally, there are many renewable energy generating facilities that are curtailed when there is an oversupply of generation. This energy gets wasted instead of being used to substitute fossil fuels. Should wheeling be allowed, the renewable energy can be utilized by others, which will drive down carbon emissions.

The use of the utilities' transmission and distribution lines can be established fairly with PUC oversight to provide neutral impacts to the ratepayer and potentially create an opportunity for the utilities' to also improve their grid with additional revenue from the use of their lines.

The first step to unlocking this potential is to have the Commission determine if this is in the public interest and establish Administrative rules.

We ask the committee to pass this bill.



**Hawaiian
Electric**

LATE

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

**SB 3194 SD2, HD1
Relating to Energy**

Thursday, April 4, 2024
2:00 pm
State Capitol, Conference Room 329

Peter Young
Director, Pricing
Hawaiian Electric

Dear Chair Nakashima, Vice Chair Sayama, and Members of the Committee,

My name is Peter Young and I am submitting testimony on behalf of Hawaiian Electric offering comments on SB 3194 SD2, HD1, Relating to Energy. We request this committee hold this bill as we strongly have serious concerns as outlined in our testimony.

Hawaiian Electric supports programs that aid renewable energy by enabling customers to use their renewable energy systems more effectively; however, the utility also recognizes the importance of equity and ensuring that the benefits of wheeling are balanced with any additional costs or burdens that may be placed on non-wheeling customers. Regulatory policies must take into account these considerations and establish policy and technical requirements that minimize cost shifting and consider the impacts on non-wheeling customers.

Hawaiian Electric appreciates that this bill allows the Public Utilities Commission to open a new investigatory docket to explore whether implementing wheeling in Hawai'i is feasible and in the public interest.

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 Hawai'i 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 continues to have strong concerns about the feasibility of addressing and balancing the above key principles in a full retail wheeling model as proposed in this bill. Enabling full retail wheeling could 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 use of its infrastructure for the benefit of some customers, 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. The Public Utilities Commission is currently investigating these and other energy equity issues in Docket No. 2022-0250, but the concepts being discussed in that proceeding do not include wheeling or the unregulated private energy producers who would be allowed to wheel under this bill.

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. 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 Hawai'i, especially those used in larger grids with large manufacturing and commercial loads.

Hawaiian Electric appreciates the Committee's consideration of its comments on SB 3194 SD2, HD1 and respectfully asks the Committee to hold this bill. Thank you for this opportunity to testify.