



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

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Testimony of the Department of Commerce and Consumer Affairs

**Before the
House Committee on Energy & Environmental Protection
Thursday, February 1, 2024
9:30 a.m.
Conference Room 325**

**On the following measure:
H.B. 2098, RELATING TO ENERGY**

Chair Lowen 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 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).

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. For example, in Docket No. 2020-0204, the Commission is evaluating a pilot that will explore the University of Hawaii's ability to receive the benefits of a remotely sited renewable energy project, which is akin to the benefits realized under a wheeling

program. The Commission also 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. While procedures in both matters are currently suspended by the Commission, the Department offers that it would be more efficient to move forward with these proceedings than establishing necessary rules or a new proceeding regarding retail wheeling by independent renewable energy generators as envisioned by this bill.

In addition, aspects of wheeling have been discussed as part of other dockets, such as Docket No. 2019-0323. Through these dockets, appropriate wheeling tariffs can be developed to: (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.

In view of the foregoing, the Department respectfully requests that the Committee consider the work the Commission has already initiated and allow the Commission to carefully complete the above dockets to enable wheeling for all customers. As noted above, establishing wheeling is complex and involves various factors. If allowed to complete the ongoing work in existing dockets, the need for additional efforts related to wheeling of renewable energy would be mitigated.

Thank you for the opportunity to testify on this bill.

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

TO THE
HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

February 1, 2024
9:30 a.m.

Chair Lowen, Vice Chair Cochran, and Members of the Committee:

MEASURE: H.B. No. 2098
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.

POSITION:

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

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 notes that 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 others. The Commission observes 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.

The Commission's existing authorities allow the ability to open investigatory dockets as resources are available. For example, there are currently multiple ongoing proceedings on related issues, including the distributed energy resources ("DER") docket, the microgrid docket, the community-based renewable energy ("CBRE") docket, and the energy equity and justice docket.

The Commission notes that the measure requires that the Commission establish "policies and procedures to implement retail wheeling, including any appropriate rate" by the end of this year. Given the complexity of the issues associated with wheeling and considering that there are many complementary and interrelated issues currently before the Commission, the Commission respectfully recommends that the requirement to implement retail wheeling by December 31, 2024 be replaced by a requirement that the Commission open a docket to determine whether retail wheeling is feasible and in the public interest in Hawaii and to determine appropriate implementation policies and procedures. This would be followed by a report to the Legislature no later than twenty days prior to the convening of the regular session of 2026, as currently contemplated by the measure.

Thank you for the opportunity to testify on this measure.



HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

February 1, 2024 at 9:30 AM

Room 325

TESTIMONY IN SUPPORT OF HB 2098

Aloha Chair Lowen, Vice Chair Cochran, and Committee members:

Blue Planet Foundation **supports HB 2098**, 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 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.

info@blueplanetfoundation.org

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Email: communications@ulupono.com

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Thursday, February 1, 2024 — 9:30 a.m.

Ulupono Initiative offers comments on HB 2098, Relating to Energy.

Dear Chair Lowen 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 HB 2098, 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.

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 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

Investing in a Sustainable Hawai'i

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>



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Testimony of the Hawaii Solar Energy Association (HSEA) Regarding HB2098, Relating to Energy, Before the House Committee on Energy and Environmental Protection

Thursday, February 1, 2024

Dear Chair Lowen, Vice Chair Cochran, and committee members,

The Hawaii Solar Energy Association (HSEA) **supports HB2098**, authorizing independent generators of renewable energy to wheel the renewable energy they produce to users of renewable energy under administrative rules established by the Public Utilities Commission.

In order to achieve Hawaii’s renewable energy and resilience goals, Hawaii needs a diverse portfolio of renewable energy assets from a variety of sources and at a variety of scales. Retail wheeling offers an attractive solution that can bring significant benefits to all Hawaii’s ratepayers. In particular, 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 to provide 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 giving this potentially “game-changing” concept a hearing and for providing the opportunity to testify in support. Please advance HB2098.

Respectfully,

/s/ Rocky Mould

Rocky Mould
Executive Director

About HSEA

Since 1977, HSEA has been advocating 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. These investments provide reliable and affordable power that reduces energy cost burden and contributes to Hawaii’s energy security as we decarbonize our economy and electric grid. HSEA members include the majority of locally owned and operated



Hawaii Solar Energy Association
Serving Hawaii Since 1977

solar and energy storage 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 that are innovating, designing, and building Hawaii's pathway to a renewable energy future.



**Hawaiian
Electric**

**TESTIMONY BEFORE THE HOUSE COMMITTEE ON
ENERGY & ENVIRONMENTAL PROTECTION**

H.B. 2098

Relating to Energy

Thursday, February 1, 2024

9:30 am

State Capitol, Conference Room 325 & Videoconference

James Abraham
Associate General Counsel, Legal Department
Hawaiian Electric

Chair Lowen, Vice Chair Cochran, and Members of the Committees:

My name is James Abraham and I am testifying on behalf of Hawaiian Electric
in opposition to H.B. 2098, Relating to Energy.

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.

These impacts must include the opportunity costs to non-wheeling customers given the limited land resources available for energy production. If private, for-profit enterprises are permitted to use the limited land viable for energy production to meet the highest bidder's load, that land will no longer be available for future RFPs that would serve all customers. This will make siting of new renewable projects more difficult and increase the pricing for future projects.

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.

Enabling full retail wheeling 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. 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 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.

Accordingly, Hawaiian Electric opposes H.B. 2098. Thank you for this opportunity to testify.



Testimony Before the House Committee on Energy & Environmental Protection

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

Tuesday, February 1, 2024; 9:30 am
Conference Room #325 & Videoconference

House Bill No. 2098 - RELATING TO ENERGY

To the Honorable Chair Nicole E. Lowen, Honorable Vice Chair Elle Cochran 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 2010, KIUC's energy mix included 10% renewable. Renewable production now stands at roughly 60%. This large growth in renewable generation is not only well-ahead of established goals, it has significantly stabilized KIUC's rates: since May 2022, KIUC has posted the lowest residential electricity rates in the state and is currently lower than rates recorded in several localities on the mainland, such as San Diego.

Rate stabilization on Kaua'i is largely attributable to KIUC 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 owned or contracted by KIUC best serve our members, as they deliver electricity at prices that smaller, privately-owned projects could not achieve.

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 questions the need for wheeling on Kaua'i given the success of the cooperative in promoting and expanding renewable energy production. If there are good, cost-effective renewable projects that KIUC is not pursuing, we are always open to receiving developer proposals and if the project has merit, we believe the energy should be made available to the full grid and all ratepayers, not just a few.

Franchised utility companies have a duty to serve all customers, the flip side is the utility needs to have the opportunity to serve all customers to avoid subsidization. We encourage a cautious and comprehensive approach to wheeling involving any non-franchise public utility operators. It is essential that any allowed wheeling include proper costing of services from the franchise utilities, which should include consideration of potentially stranded investments. KIUC also supports the preservation of the Public Utilities Commission's ability to disallow wheeling projects if they are detrimental to an electric utility or the public interest (i.e., other utility customers).

Mahalo for your consideration.



**Testimony to the Committees on Energy & Environmental Protection
February 1, 2024, 9:30 AM
VIA Video Conference & Conference Room 325, Hawaii State Capitol**

HB 2098

Chair Lowen, Vice Chair Cochran, and members of the committee,

Hawaii Clean Power Alliance (HCPA) **supports** HB 2098, 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.

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.

The committee wisely recognizes that the state's progress to its clean energy goals is hindered by the continued use of imported fossil fuels, utilizing roughly the same amount in 2023 as was utilized in 2010. Additionally, it has become evident that clean energy projects are both short- and long-term economic drivers of jobs and new business development. Multi-national high-tech companies who are committed to ESG and clean, net-zero energy are looking for renewable and affordable energy. Hawaii was wise to embrace clean energy early in its development and continues to see its value to the planet, the state, ratepayers, and the local economy and can attract these types of companies to locate on our shores.

Unfortunately, in its current structure, Hawaii bears the burden of the highest energy costs in the country, putting a heavy burden on ratepayers and dampening the numerous economic drivers that can be cultivated in a clean energy economy. This proposal wisely recognizes that incentivizing diversification of the state's economy through clean energy operations would be a tremendous relief to ratepayers and an opportunity to attract high value businesses to the state. Further, that diversification will propel the state towards its clean energy goals.

Hawaii has felt the realities of its tenuous utility service personally and tragically over the years and most recently over the last few months. The Lahaina fires left the island (and by extension, the state) devastated, and the aftermath was worsened by the inability to access power, internet, and other basic services for weeks. The unscheduled lack of energy generation and rolling black outs most recently on Oahu and the Big Island are stark reminders that our electric supply needs to have much more generation as and consumers and businesses are faced with uncertainty and difficulties.

To provide resiliency and lower costs, Hawaii needs programs that support communities with microgrids. This proposal, which allows generation from one area to supply demand in another area, brings a proven technology widely used across the country that will provide resiliency, reliability, and lower costs. In turn, the ability to "wheel" power from one area to another will inevitably foster new technologies such as sustainable transportation fuels for aviation and transportation as well as economic incentives for multinational companies to bring business to the state.

We also recognize that the use of the utilities' transmission and distribution lines can be established fairly with the 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 streams.

We ask the committee to pass this bill.



Environmental Caucus of
The Democratic Party of Hawai'i

Energy & Climate Action Committee

Thursday, February 1, 2024, 9:30 pm

House Committee on Energy and Environmental Protection

HOUSE BILL 2098 – RELATING TO ENERGY

Position: Strong Support

Me ke Aloha, Chair Lowen, Vice-Chair Cochrane, and members of the House Committee on Energy and Environmental Protection:

HB2098 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.

The Energy & Climate Action Committee enthusiastically supports decentralized grid generation of electricity. It is the future for resilience and for speeded achievement of the State's renewable energy goals. Our concern is that shareholders will not appreciate this business model, as it rewards individual solar power owner-providers and requires compensation. But it's closer to a truly public utility and is absolutely appropriate. This is especially true for Lāhainā: rebuilding with universal solar or wind provision, rather than energy "farms" or polluting combustion-production is the soundest energy security.

Mahalo for the opportunity to address this matter.

/s/ Charley Ice, Chair, Energy and Climate Action Committee
Environmental Caucus of the Democratic Party



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COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair
Rep. Elle Cochran, Vice Chair

DATE: Thursday, February 1, 2024
TIME: 9:30 a.m.
PLACE: Conference Room 325

HB 2098 RELATING TO ENERGY

Please Hold

Aloha Chair Lowen, Vice Chair Cochran, 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 54 years. Life of the Land's 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.

HB 2098 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.

Wheeling sounds simple but is complex to implement especially to ensure that other customers are not losers in the process.

On April 30, 2004, the Legislature adopted Senate Concurrent Resolution No. 180. Among other things, the Legislature requested that the commission explore ways to implement intra-governmental wheeling to facilitate government wheeling of electricity. The Legislature defined wheeling as "the process of transmitting electric power from a seller's point of generation across a third-party-owned transmission and distribution system to the seller's retail customer."

Wheeling isn't really moving the electrons, rather it is just accounting, with supply offsetting demand even though they may occur at different times and in different places. The relative cost of supply and demand may be further differentiated due to time-of-use rates.

The Public Utilities Commission opened a proceeding on intra-governmental wheeling in 2007. Life of the Land was accepted as an intervenor.¹ The Commission closed the docket in October 2019, "without taking substantive action herein."

The Commission noted that they had recently opened a microgrid services tariff proceeding. Life of the Land was an intervenor in phase 1 of the microgrid services tariff proceeding.²

¹ Docket No. 2007-0176. Other parties and participants are/were the Consumer Advocate, Kauai Island Utility Cooperative, County of Hawaii, Hawaii Renewable Energy Alliance, Castle & Cooke Resorts, City and County of Honolulu, Department of Business, Economic Development, and Tourism, Department of Defense, County of Maui, Realgreen Power, Puna Geothermal Venture, and Lanai Sustainability Research

² Docket No. 2018-0163. Other parties and participants are/were the Consumer Advocate, Microgrid Resources Coalition, Distributed Energy Resources Council of Hawaii, Ulupono Initiative LLC, and Energy Island

The microgrid services docket distinguished two types of microgrids: Customer microgrid where a customer's infrastructure is exclusively used to supply all their own electricity needs during emergencies. Hybrid microgrid in which an operator may combine utility infrastructure and customer infrastructure to supply electricity to microgrid members during an emergency. In essence, during islanding, a microgrid operator would wheel electricity across the utility infrastructure.

Wheeling has also been discussed in the Distributed Energy Resources proceeding.³

More recently, HECO opened a Green Tariff proceeding whereby the University of Hawaii would produce solar in Ewa and get credit for it at UH Manoa to help the university become net zero.⁴

Hawaiian Electric and the University of Hawai'i filed a letter with the Commission on July 14, 2023, supplemented by a Hawaiian Electric letter filed on September 19, 2023. HECO requested a delay in the proceeding requested a delay in the proceeding "due to the complexity of this endeavor, the number of issues, and the unprecedented situation on Maui." Among the issues were the "financial impacts to UH, Hawaiian Electric, and its customers."

A wheeling bill was considered by the 2023 Legislature.

The Consumer Advocate testified, "The Department respectfully requests that the Committee consider the work the Commission has already initiated and allow the

³ Docket No. 2019-0323. Parties and participants are/were the Consumer Advocate, Distributed Energy Resources Council of Hawaii, Hawaii PV Coalition, Hawaii Solar Energy Association

⁴ Docket No. 2020-0204. Other parties and participants are/were the Consumer Advocate,

Commission to carefully complete its above dockets to enable wheeling for all customers. As noted above, establishing wheeling is complex and involves various factors. If allowed to complete the ongoing work in existing dockets, the need for an additional docket to investigate wheeling would be mitigated, if not obviated.”

Life of the Land gave several examples of different types of wheeling. “It is important to recognize that in each of these examples of wheeling, the cost to non-participants cannot be negatively impacted. The Consumer Advocate and the Public Utilities Commission are very concerned about cost impacts to non-participants.”

Hawaiian Electric recognized “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 impact on non-wheeling customers.”

Mahalo

Henry Curtis

Executive Director

Tawhiri Power LLC



TESTIMONY OF TAWHIRI POWER LLC
ON HB 2098 BEFORE THE HOUSE COMMITTEE ON
ENERGY & ENVIRONMENTAL PROTECTION
THURSDAY, FEBRUARY 1, 2024 AT 9:30 a.m.

TO THE HONORABLE CHAIR LOWEN, VICE CHAIR COCHRAN AND MEMBERS OF
THE COMMITTEE:

Tawhiri Power LLC (“TPL”)¹ strongly supports HB 2098 because it will be a major step forward in helping the State reach its goal of obtaining 100% of its energy needs from renewable sources.

This bill is long overdue. In past Sessions there have been bills on wheeling and generally the folks opposing these bills have argued that the bills are not necessary because there is already a docket at the Public Utilities Commission (“PUC”) on this issue. What they fail to say is that this docket has made little progress in front of the PUC.

Currently, without retail wheeling, renewable energy produced by Independent Power Producers (“IPPs”) generally can only be sold to the Utility or used by the IPP on its site. If there is any additional renewable energy that is not committed to the Utility or cannot be used by the IPP on its site, it is wasted. This is totally unacceptable. This bill is necessary to start the progress allowing renewable generators to sell energy they produce directly to end users.

If we are serious about being 100% renewable, we can no longer delay and we need to implement wheeling now. Thus, we strongly urge the Committee to pass this bill out.

Thank you for the opportunity to testify.

¹ TPL is an Independent Power Producer (“IPP”) that owns and operates Pakini Nui Wind Farm located in the South Point Area on the Island of Hawaii.

Statement of
Brigadier General Stanley J. Osserman Jr. (USAF Ret.), President
Tigershark, LLC
Before the
House Committee on Energy & Environmental Protection
1 February 2024
9:30 am
State Capitol Conference Room #325
In consideration of
HB2098
Relating to Long Duration Clean Energy Storage

Chair Lowen

30 January 2024

Vice Chair Cochran and Distinguished Committee Members:

I stand in strong support to 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), my HCATT Director position was designated by the legislature as the “Hydrogen Implementation Coordinator for the State of Hawaii”. I continue to serve our state by promoting clean, renewable energy solutions. This testimony is NOT being given for compensation of any kind, commercial, political or private. 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.

My experience in working with hydrogen and promoting it for many uses in Hawaii has led me to some disappointing conclusions in the world of Power Purchase Agreements (PPAs). In about 2017, I was asked by Hawaii Gas to help them use curtailed power from their Mililani commercial solar array to build a hydrogen station. I was thrilled at the offer to move our State ahead in hydrogen fueling infrastructure, but I told them that they needed to have their lawyers look at their PPA because I was told by others with the same idea that their PPA contract did not allow the owner of the PV system to use any curtailed power, even if not moved on the HECO distribution grid. This even included using power on their own TMK and not using the HECO grid (“wheeling”). I’m certain that there were solid “operational and safety” reasons for HECO to include this in the contract. Probably (I suppose) to avoid back-feeding their grid during an outage. They called me the next day and their lawyers confirmed what I had told them, and the project died. We cannot afford to have these kinds of setbacks as Hawaii presses towards their

Renewable Portfolio Standards by 2045. HECO is not making the progress that I think they need at this point. HB 2098 will drive the necessary framework to find solutions to this issue and help HECO collect reasonable revenues without hampering their grid reliability and safety. Something that independent power providers and others can profit from and move Hawaii forward in clean sustainable energy.

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

President, Tigershark, LLC

HB-2098

Submitted on: 1/31/2024 6:25:31 PM

Testimony for EEP on 2/1/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Keith Neal	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Lowen and members of the EEP

I support HB2098

Rules must enable independent generators of clean, renewable energy to wheel electricity they produce.

Thank you for consideration,

Keith Neal

Waimea