



DAVID Y. IGE
GOVERNOR

JOSH GREEN
LT. GOVERNOR

**STATE OF HAWAII
OFFICE OF THE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS**

335 MERCHANT STREET, ROOM 310
P.O. BOX 541
HONOLULU, HAWAII 96809
Phone Number: 586-2850
Fax Number: 586-2856
cca.hawaii.gov

CATHERINE P. AWAKUNI COLÓN
DIRECTOR

JO ANN M. UCHIDA TAKEUCHI
DEPUTY DIRECTOR

Testimony of the Department of Commerce and Consumer Affairs

**Before the
House Committee on Consumer Protection & Commerce
Thursday, February 10, 2022
2:00 PM
Via Videoconference**

**On the following measure:
H.B. 1807, HD1, RELATING TO ENERGY INTERCONNECTION**

Chair Johanson 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 direct the Public Utilities Commission (Commission) to adopt guidelines for interconnection applications that would trigger distribution, transmission, or other utility infrastructure upgrade costs for new developments in excess of a threshold determined by the commission.

The Department appreciates the intent of this bill to take energy efficiency and distributed energy resources into consideration for any new load center transmission and distribution interconnection above a certain dollar threshold. However, the Department respectfully offers that this measure may not be necessary at this time because of two already existing Commission requirements.

First, there are existing and ongoing procedures outlined in General Order No. 7, which are triggered by electric utility capital expenditures above \$2.5 million net of

contributions in aid of construction. Thus, qualifying capital expenditures, including those that might relate to transmission and distribution projects to serve new load would require an application for approval to commit funds to any such project, wherein an in-depth analysis of the need for the proposed project, including an analysis of the load forecast justifying the proposed distribution, sub-transmission, and/or transmission project, would be performed.

In addition, the Commission already requires the electric utility companies to include consideration of non-wire alternatives in those General Order No. 7 applications, wherein the electric utility is required to detail how they considered distributed energy resources, energy efficiency measures, and other non-wire alternatives to obviate or minimize the scope and cost of any proposed distribution, sub-transmission, and/or transmission project

Furthermore, the need for the proposed language allowing the Commission to consider cost recovery through a mechanism that elects to develop and implement non-wire alternatives is unnecessary. In the recently approved performance-based regulation framework, the Commission adopted a proposed Exceptional Project Recovery Mechanism, which, if justified, allows the electric utility to recover the costs associated with transformational-types of projects, such as a non-wire alternative that could obviate the need for transmission, sub-transmission, and/or distribution facilities.

In HD1, there is a proposed exemption from the requirements of load management analysis for electric vehicle charging infrastructure applications. While the Department appreciates the notion of exempting electric vehicle charging infrastructure applications, there may be unintended consequences. For example, it has been recognized that electric vehicle charging that takes advantage of smart charging tariff rate designs and program designs that takes advantage of the abundance of energy from solar generation facilitates not only the transition off of gasoline but also represents an approach that ensures that electric system needs are considered when planning and designing electric vehicle charging projects and programs. Exempting vehicle charging applications from the proposed measure could result in higher costs to customers and in less-efficient and optimal programs.

If this committee intends to pass the proposed measure, however, the Department notes that a typographical correction should be made to the proposed section 269-142(d)(2)(B), where the word “local” should be replaced with “load” to read, “...but not limited to the potential for the load management plan to defer ...”

Thank you for the opportunity to testify on this bill.

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

TO THE
HOUSE COMMITTEE ON
CONSUMER PROTECTION AND COMMERCE

February 10, 2022
2:00 p.m.

Chair Johanson and Members of the Committee:

MEASURE: H.B. No. 1800, HD1

TITLE: RELATING TO CLIMATE MITIGATION.

DESCRIPTION: Establishes a goal for the statewide greenhouse gas emissions limit to be at least seventy per cent below 2005 levels by 2030. Requires the Hawaii state energy office to conduct a study to determine Hawaii's pathway to decarbonization and identify challenges, opportunities, and actions that will be needed to achieve those goals. Appropriates funds out of the energy security special fund for the study. Effective 7/1/2100. (HD1)

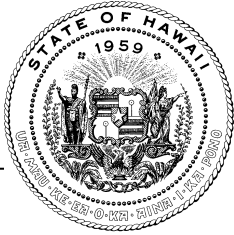
POSITION:

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

COMMENTS:

The Commission supports the intent of this measure to reduce statewide greenhouse gas emissions and study Hawaii's pathway to decarbonization. Should this measure pass, the Commission will coordinate with the Hawaii State Energy Office on implementing these goals as they pertain to the state's energy utilities.

Thank you for the opportunity to testify on this measure.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone:
Web:

(808) 587-3807
energy.hawaii.gov

Testimony of
SCOTT J. GLENN, Chief Energy Officer

before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Thursday, February 10, 2022
2:00 PM
State Capitol, Conference Room 329 & Videoconference

**COMMENTS
HB 1807 HD1
RELATING TO ENERGY INTERCONNECTION.**

Chair Johanson, Vice Chair Kitagawa, and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on HB 1807, HD1, which Directs the public utilities commission to adopt guidelines for interconnection applications that would trigger distribution, transmission, or other utility infrastructure upgrade costs in excess of a threshold determined by the commission.

HSEO's comments are guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy.

HSEO notes that the use of non-wires alternatives is frequently discussed and included in proceedings of the Hawai'i PUC, and is required of Hawai'i's electric utilities. Non-wires alternatives are acknowledged components of cost control strategies, and Hawai'i continues to receive recognition for progress in this area.

Allowing the PUC to continue to incorporate these requirements in all appropriate situations would provide flexibility as needs, conditions, and technologies change.

Thank you for the opportunity to testify.

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

TO THE
HOUSE COMMITTEE ON
CONSUMER PROTECTION AND COMMERCE

February 10, 2022
2:00 p.m.

Chair Johanson and Members of the Committee:

MEASURE: H.B. No. 1807, HD1

TITLE: RELATING TO ENERGY INTERCONNECTION.

DESCRIPTION: Directs the public utilities commission to adopt guidelines for interconnection applications that would trigger distribution, transmission, or other utility infrastructure upgrade costs in excess of a threshold determined by the commission. Effective 7/1/2100. (HD1)

POSITION:

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

COMMENTS:

The Commission supports the intent of this measure to further incorporate non-wires alternatives into utility planning, in order to reduce the need for utility expenditures on distribution, transmission, and other utility infrastructure when interconnecting certain new developments. The Commission also appreciates the language that would allow the Commission to implement the provisions of this measure either by rule or order.

Thank you for the opportunity to testify on this measure.



**Hawaiian
Electric**

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

H.B. 1807, H.D. 1

Relating to Energy Interconnection

Thursday, February 10, 2022

2:00 p.m., Agenda Item #9

State Capitol, Conference Room 329

Ken Aramaki

Director, Transmission & Distribution and Interconnection Planning Division
Hawaiian Electric Company, Inc.

Chair Johanson, Vice Chair Kitagawa, and Members of the Committee,

My name is Ken Aramaki and I am testifying on behalf of Hawaiian Electric Company, Inc. (“Hawaiian Electric” or the “Company”) respectfully in **opposition** to H.B. 1807, Relating to Energy Interconnection.

We strongly support the intent of creating additional opportunities to smartly and cost-effectively add additional energy efficiency (“EE”) and distributed energy resources (“DER”) measures in new construction, but we oppose the bill in its current form because the proposed guidelines are unnecessary and will add undue burden in the form of additional costs to the Company’s current practices and procedures.

H.B. 1807 starts with the assertion that Hawaiian Electric “currently invest in grid infrastructure based on the assumption that one hundred per cent of the estimated load from new home and construction developments will be served by the electric grid” – a statement which is just not true. In fact, the Company’s Integrated Grid Planning process, which plans for near- and long-term electrical needs incorporates DER and EE which result in decreases to forecasted electrical demand and peak loads (including

electric vehicles which increase demand). For example, the Company's forecasts in the year 2030, DER and EE account for reductions to the forecasted net demand (Megawatt-hours) by 35% and reductions of peak load (Megawatts) by close to 30%. The resultant net demand and peak forecasts are used to plan future generation, transmission, and distribution infrastructure.

When it comes to individual customer loads and services requests, the Company has already begun implementing a process to work with customers developing properties and buildings to identify EE, DER and other opportunities (such as demand response) to reduce the demand for electricity. This provides a process and additional opportunity for the developer to add additional EE, DER, or demand response opportunities beyond what they might have already been planning for in their initial design of the properties. Through this process, the Company is able to make more informed decisions on the energy requirements for particular service requests. The ultimate goal of these processes are to mitigate unnecessary infrastructure investments made by the Company, ratepayers, and developers. It should be noted that individual service requests may or may not have an impact on infrastructure upstream (i.e., at higher voltages) as they are designed to accommodate planned peak and demands coincident with other services or demands on the system. For service requests that do not fall in the category of large developments, requests are also reviewed and adjusted downward based on other services with similar characteristics – to mitigate unnecessary infrastructure.

The aforementioned processes, reviews, and collaboration with developers are used to proceed through the existing regulatory framework. In times where new developments require additional transmission and distribution upgrades larger than \$2.5M, the Company is required to seek pre-approval from the Public Utilities

Commission (“PUC”) in order to implement such a project. Within the application for these projects, the Company is required to demonstrate that the project is in the best interest of ratepayers. Justifications include calculations and documentation to show the need for the project, as well as the consideration of non-wires alternatives (e.g., energy efficiency, demand response, distributed energy resources, etc.) to meet the needs of the project.

This bill proposes to add another regulatory step to an already lengthy, comprehensive regulatory process – current regulatory review and approval typically takes upwards of 12 months or more, upon which if approved, construction of electrical infrastructure commences. This timeline already places pressure on Hawaiian Electric and the Customer to finalize plans even further ahead of project construction, increasing upfront investments, possibly years ahead of project construction, for submittal to the Public Utilities Commission in order to meet Customers’ development timelines. Adding another regulatory step earlier in the process assumes the Customer has finalized plans for their project and that the Customer and Hawaiian Electric have worked out solutions to manage the planned electrical demand and mitigate unnecessary infrastructure, which in reality, are complex issues that would not be solved at such a stage of development and an additional regulatory process would hinder progress towards such a solution.

Hawaiian Electric appreciates and recognizes the concern of overbuilding infrastructure that may be underutilized. Within the existing regulatory processes and procedures, Hawaiian Electric is already required to address these concerns. The additional regulatory process step contemplated in this bill will increase costs and impact customer timelines, but still result in the same outcome.

Thank you for this opportunity to comment on H.B. 1807.

HB-1807-HD-1

Submitted on: 2/8/2022 4:52:18 PM

Testimony for CPC on 2/10/2022 2:00:00 PM

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

Comments:

I support HB1807.

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.

Respectfully submitted,

Keith Neal



Hawaii Solar Energy Association
Serving Hawaii Since 1977

LATE

Testimony of The Hawaii Solar Energy Association Regarding HB 1807 HD1, Relating to Energy Interconnection, Before the House Committee on Consumer Protection and Commerce

Thursday, February 10, 2022

Chair Johanson, Vice-Chair Kitagawa, and members of the Committee, my name is Rocky Mould and I am the Executive Director of the Hawaii Solar Energy Association (HSEA). We **support the intent of HB 1807 HD1** which directs the Public Utilities Commission to adopt guidelines for interconnection applications that trigger distribution, transmission, or other utility infrastructure upgrade costs in excess of a threshold determined by the Commission.

HSEA members include the majority of locally owned and operated renewable energy companies in the State of Hawaii, employing thousands of local individuals in a diverse set of well-paying jobs including, but not limited to, contractors, designers, electricians, engineers, financiers, installers, salespeople, and service technicians.

HSEA advocates for policies that provide cost-effective, equitable, and impactful solutions to achieving Hawaii's climate and resilience goals by enabling residents and businesses to invest in and benefit from the transition to clean energy. Distributed energy resources (DERs) are the leading contributor to Hawaii's clean energy transition with 45.7% of Hawaii's renewable energy coming from customer-sited, grid-connected solar PV.¹ And now, Hawaii leads the nation, by far, in pairing solar PV with energy storage at 79% of all residential and 38% of all small-scale commercial installations.² These investments in resilient power systems not only save energy costs for residents and businesses, but also provide energy security and reliability for the entire electricity system as we retire fossil fuel power plants such the AES coal plant.

Requiring large new developments, the utility, and other stakeholders to include DERs and other non-wires alternatives in their planning at an early stage will lower the overall costs to achieve the state's urgent 100% renewable energy and carbon neutrality mandates.

¹ See Hawaiian Electric's "Key Performance Metrics, Renewable Portfolio Standard compliance" available at <https://www.hawaiianelectric.com/about-us/key-performance-metrics/renewable-energy>.

² See Lawrence Berkeley National Laboratory, *Tracking the Sun, Pricing and Design Trends for Distributed Photovoltaic Systems in the United States* (2021 Edition) at Slide 14 (finding that "Hawaii has, by far, the highest storage attachment rates of any state").



Hawaii Solar Energy Association
Serving Hawaii Since 1977

HSEA **supports the intent of HB 1807 HD1** and respectfully asks the committee to advance this measure.

Thank you for the opportunity to testify.



February 10, 2022

Representative Aaron Ling Johanson, Chair
Representative Lisa Kitagawa, Vice Chair
House Committee on Consumer Protection & Commerce

Testimony in Opposition to HB 1807, HD1 RELATING TO ENERGY INTERCONNECTION. (Directs the public utilities commission to adopt guidelines for interconnection applications that would trigger distribution, transmission, or other utility infrastructure upgrade costs in excess of a threshold determined by the commission. Effective 7/1/2100. [HD1])

Thursday, February 10, 2022, 2:00 p.m.; Conference Room 329 and Videoconference

The Land Use Research Foundation of Hawaii (LURF) is a private, non-profit research and trade association whose members include major Hawaii landowners, developers, and utility companies. LURF's mission is to advocate for reasonable, rational, and equitable land use planning, legislation and regulations that encourage well-planned economic growth and development, while safeguarding Hawaii's significant natural and cultural resources, and public health and safety.

LURF **strongly opposes** the current version of HB 1807, HD1, because it is **redundant, unnecessary, and will have potential negative impacts**, including, among other things, **increased costs** and **additional delays** for affordable housing and other multi-use housing developments.

HB 1807, HD1. This measure directs the Public Utilities Commission (Commission) to adopt guidelines for interconnection applications that would trigger distribution, transmission, or other utility infrastructure upgrade costs in excess of a threshold determined by the Commission.

LURF's Position. LURF and its members support renewable energy and the state's renewable energy goals, and LURF members lead the state with respect to renewable energy research, development and installation of renewable energy technology and implementation energy efficiency alternatives, as our statewide membership includes the two largest energy utilities, major landowners, home-building, commercial and industrial developers, and hotels.

LURF appreciates and supports the general intent of HB 1807, HD1, however, we must **oppose** the current version of this bill, based on the information from LURF members, and the prior testimonies and renewable energy expertise of Hawaiian Electric Company (Hawaiian Electric), the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs (Consumer Advocate), and Tesla.

The reasons for LURF's opposition are as follows:

- According to Hawaiian Electric Company (Hawaiian Electric), HB 1807, HD1 is **redundant and unnecessary**, because already has a long-term planning process with early planning for new residential, commercial, or industrial developments that incorporate distributed energy resources (DER) measures and additional energy efficiency (EE) and non-wire alternatives (NWA).
- HB 1807 is also **redundant and unnecessary**, because the Public Utilities Commission's (Commission) existing regulatory framework already requires Hawaiian Electric to seek **pre-approval** from the Commission for new developments that require additional transmission and distribution upgrades larger than \$2.5 million. Hawaiian Electric has explained that the Commission review requires detailed calculations, documentation and other evidence relating to DER, EE, NWA, demand response, and a demonstration that the proposed projects are in the best interests of the ratepayers.
- This measure is also **redundant and unnecessary** because we understand that the ongoing procedures in the Commission's General Order 7 already requires a similar in-depth analysis.
- This bill is further **redundant and unnecessary** because we believe that electric utility companies are already required to include consideration of NWA in applications under the Commission's General Order 7.
- The portion of HB 1807, HD1 that relates to cost recovery for NWA is also **redundant and unnecessary** because we understand that the Commission has recently adopted a proposed Exceptional Project Recovery Mechanism, which requires the electric utility to justify cost recovery for NWA and other exceptional projects.
- This measure is also **redundant and unnecessary** because we believe that Hawaiian Electric Company's Annual Adequacy of Supply studies may already address much or all the issues and information in HB 1807, HD1.
- Furthermore, this bill may also be **redundant and unnecessary**, as noted in the testimony of the Consumer Advocate, which notes that the Commission is continuing to investigate the growth of DER in Docket No. 2019-323 and is applying the insights from that docket to utility grid planning in Docket No. 2019-327.

- Based on discussions between Hawaiian Electric and affordable housing homebuilders, **the requirements of this measure will add substantial costs that may make some affordable housing projects infeasible.**
- Finally, affordable, and other housing developments face challenges like those argued by Tesla in a prior hearing - that the requirements of HB 1807 would have **potential negative impacts on the speed and scale of the deployment of projects** involving electric vehicle (EV) chargers and **could result in significant delays.** Based on what appears to be a **compelling "delay" argument**, the House Committee on Energy and Environmental Protection **EXEMPTED Tesla's EV charging infrastructure** from the provisions of this measure. The affordable housing and homebuilding industry would ask for the **same exemption as Tesla.**

For the reasons stated above, LURF **opposes** HB 1807, HD1, and respectfully requests that this Committee **hold this bill**, and allow the Commission, electric utilities, and new residential, commercial, and industrial developments to continue to use the existing Commission requirements and processes to address the matters that are the subject of this bill.

Thank you for the opportunity to present testimony regarding this matter.