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# A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. The legislature finds that accelerating the  
2 development of renewable energy to reduce greenhouse gases is a  
3 high priority. The legislature has enacted numerous Acts to  
4 achieve this objective, including:

- 5           (1) Act 97, Session Laws of Hawaii 2015, which established  
6 a renewable energy portfolio standards' target of one  
7 hundred per cent renewable electric energy by  
8 December 31, 2045;
- 9           (2) Act 15, Session Laws of Hawaii 2018, which established  
10 a statewide zero emissions clean economy target to  
11 sequester throughout the State more atmospheric carbon  
12 and greenhouse gases than emitted, as quickly as  
13 practicable but no later than 2045; and
- 14           (3) Act 238, Session Laws of Hawaii 2022, which  
15 established a statewide target that includes a  
16 greenhouse gas emissions limit of at least fifty per



1 cent below 2005 greenhouse gas emission levels no  
2 later than 2030.

3 The legislature further finds that the timely completion of  
4 grid-connected renewable energy projects is also a high priority  
5 as it will help the State achieve the targets and limit  
6 established through prior legislation. On November 13, 2020,  
7 the public utilities commission issued a letter to the parties  
8 in docket numbers 2015-0389 (Community Based Renewable Energy),  
9 2017-0352 (Hawaiian Electric Renewable Requests for Proposals),  
10 and 2018-0165 (Integrated Grid Planning), stating that it "is  
11 markedly concerned that Hawaiian Electric [Company]'s  
12 interconnection processes and policies are increasing  
13 development costs and extending renewable project timelines".

14 On December 23, 2020, under docket number 2018-0088  
15 (Performance-Based Regulation), the public utilities commission  
16 issued order number 37507, indicating, in part, that it was  
17 concerned about interconnection delays and will implement a  
18 performance incentive mechanism to encourage Hawaiian Electric  
19 Company to accelerate the interconnection process. Order number  
20 37507 also stated that "the scheduled retirement of the AES  
21 Power Plant in 2022, as well as [Hawaiian Electric Company,



1 Inc.; Hawaii Electric Light Company, Inc.; and Maui Electric  
2 Company, Limited's] proposal to delay interconnecting several  
3 renewable energy and storage projects recently approved by the  
4 commission, underscores the need for expeditiously securing  
5 alternative sources of grid services to ensure that system needs  
6 are met".

7 The legislature notes that during phase 1 and phase 2 of  
8 the electric utility's procurement under docket no. 2017-0352,  
9 projects have been delayed or terminated, due in part to costs  
10 and delays of interconnection. On February 11, 2021, the public  
11 utilities commission opened docket number 2021-0024 to review  
12 Hawaiian Electric Company's interconnection process and  
13 transition plans for retirement of fossil fuel plants.

14 In 2022, the public utilities commission testified that it  
15 had set up a tracker accounts to quantify and monitor the cost  
16 of project delays. As of the monthly update submitted by the  
17 Hawaiian Electric Company on January 21, 2022, the tracked cost  
18 totaled over \$10,000,000 across several projects. The public  
19 utilities commission also testified that it issued a request for  
20 information to solicit input from qualified entities to serve  
21 under contract as a Hawaii electric reliability administrator.



1 On September 9, 2022, instead of procuring a Hawaii electric  
2 reliability administrator, the public utilities commission  
3 awarded a procurement contract that hired an independent  
4 engineer to assist the commission in overseeing the technical  
5 aspects of the upcoming phase 3 procurement processes, reviewing  
6 interconnection requirements that had already been established  
7 by the Hawaiian Electric Company and associated costs, resolving  
8 technical disputes related to interconnection of resources,  
9 assisting in the implementation of interconnection-related  
10 performance incentive mechanisms, and serving a general advisory  
11 role to the commission on issues related to Hawaiian Electric  
12 Company's interconnection process. These duties only cover a  
13 subset of the duties of a Hawaii electric reliability  
14 administrator, pursuant to part IX of chapter 269, Hawaii  
15 Revised Statutes, and therefore will not result in commission-  
16 established reliability standards for interconnection and the  
17 grid, an interconnection dispute resolution process, nor long-  
18 term grid planning for the State.

19 In the latter half of 2022, the public utilities commission  
20 approved Hawaiian Electric Company's recommendation to complete  
21 the interconnection requirements study and total estimated



1 interconnection cost for each phase 3 procurement project  
2 selected prior to the signing and filing of the power purchase  
3 agreement with the public utilities commission for approval.

4       However, phase 3 procurement projects are required to  
5 assume interconnection costs prior to the completion of the  
6 interconnection requirements study and total estimated  
7 interconnection cost. If these costs are higher than what the  
8 project assumed before or after bid submission to the public  
9 utilities commission, the project is not allowed to adjust its  
10 bid price to reflect the higher-than-anticipated cost. Moreover,  
11 under the commission-approved model power purchase agreement,  
12 Hawaiian Electric Company, who performs the interconnection  
13 construction, is further permitted to increase the project's  
14 interconnection costs. Thus, the revised process approved by  
15 the public utilities commission does not result in meaningful  
16 reform to the interconnection issues impacting timely and cost-  
17 effective renewable energy development, which affects the  
18 ratepayer.

19       Also in the latter half of 2022, Hawaiian Electric Company  
20 issued four separate requests to Hawaii Island customers to  
21 limit their use of electricity to prevent the possibility of



1 rolling blackouts due to factors including the unexpected loss  
2 of several large generators, lower wind resources, and lower-  
3 than-expected geothermal output. This further substantiates the  
4 urgency to create and implement reliability standards through a  
5 Hawaii electric reliability administrator.

6       The legislature also finds that the State does not regulate  
7 interconnection costs, which results in the ratepayer bearing  
8 the full financial burden of both interconnection costs and  
9 utility network upgrades in the electricity rates. The Federal  
10 Energy Regulatory Commission, an independent federal agency that  
11 regulates the interstate transmission of natural gas, oil, and  
12 electricity and natural gas and hydropower projects, has  
13 developed a simple test for distinguishing interconnection  
14 facilities from network upgrades. In its Order No. 2003, the  
15 Federal Energy Regulatory Commission stated that,  
16 "interconnection facilities are found between the  
17 interconnection customer's generating facility and the  
18 transmission provider's transmission system [...] network  
19 upgrades include only facilities at or beyond the point where  
20 the interconnection customer's generating facility interconnects  
21 to the transmission provider's transmission system." This



1 distinction clarifies and determines which party has ultimate  
2 cost responsibility. Order No. 2003 also generally found that  
3 "it is just and reasonable for the interconnection customer to  
4 pay for interconnection facilities but not for network  
5 upgrades."

6 Establishing grid reliability standards, regulating the  
7 timely and transparent interconnection of utility-scale  
8 renewable energy projects, and distinguishing the cost  
9 responsibilities between interconnection facilities and utility  
10 network upgrades will help to bring utility-scale renewable  
11 energy projects online sooner; decrease electricity rates for  
12 consumers; provide project developers with added certainty  
13 regarding project timelines and transparent costs; encourage  
14 lower bid prices; achieve the State's renewable portfolio  
15 standard goals; establish long-term institutional knowledge  
16 within the public utilities commission; reduce greenhouse gas  
17 emissions; and mitigate the effects of climate change.

18 Accordingly, the purpose of this Act is to:

19 (1) Require the public utilities commission to establish  
20 reliability standards and interconnection requirements  
21 for all electric utilities and all users, owners, or



1 operators of the Hawaii electric system; provided that  
2 any costs for changes in reliability standards or  
3 interconnection requirements shall not be the  
4 responsibility of the interconnection customer after  
5 the interconnection customer's power purchase  
6 agreement has been approved by the public utilities  
7 commission;

- 8 (2) Require the public utilities commission to:
- 9 (A) Distinguish between interconnection facilities  
10 and utility network upgrades;
  - 11 (B) Ensure that the cost of interconnection  
12 facilities shall be the responsibility of the  
13 interconnection customer; and
  - 14 (C) Ensure that the cost of utility network upgrades  
15 at and beyond the point of interconnection to the  
16 utility's transmission system shall be the sole  
17 responsibility of the utility transmission  
18 provider;

19 (3) Establish a timeline and requirements for  
20 interconnection procedures to be established by the



1 public utilities commission for certain utility-scale  
2 renewable energy projects;

3 (4) Make the public utilities commission's contracting for  
4 the Hawaii electric reliability administrator  
5 mandatory rather than discretionary; and

6 (5) Require the public utilities commission to submit an  
7 annual report and assessment of the Hawaii electric  
8 reliability administrator to the legislature.

9 SECTION 2. Section 269-142, Hawaii Revised Statutes, is  
10 amended to read as follows:

11 " ~~[+] §269-142 [+] Reliability standards; interconnection~~  
12 ~~requirements; adoption and development; force and effect.~~ (a)  
13 The commission ~~[may]~~ shall adopt, by rule or order, reliability  
14 standards and interconnection requirements. Reliability  
15 standards and interconnection requirements adopted by the  
16 commission shall apply to any electric utility and any user,  
17 owner, or operator of the Hawaii electric system. The  
18 commission shall not contract for the performance of the  
19 functions under this subsection to any other entity as provided  
20 under section 269-147.



1           (b) The commission [~~may~~] shall develop reliability  
2 standards and interconnection requirements as it determines  
3 necessary or upon recommendation from any entity, including an  
4 entity contracted by the commission to serve as the Hawaii  
5 electricity reliability administrator provided for under this  
6 part, for the continuing reliable design and operation of the  
7 Hawaii electric system[-]; provided that any costs for changes  
8 in reliability standards or interconnection requirements shall  
9 not be the responsibility of the interconnection customer after  
10 the interconnection customer's power purchase agreement has been  
11 approved by the commission. Any reliability standard or  
12 interconnection requirement developed by the commission shall be  
13 adopted by the commission in accordance with subsection (a) in  
14 order to be effective. The commission shall not contract for  
15 the performance of the functions under this subsection to any  
16 other entity as provided under section 269-147.

17           (c) The commission shall:

18           (1) Distinguish between interconnection facilities and  
19           utility network upgrades;



1           (2) Ensure that the cost of interconnection facilities  
2           shall be the responsibility of the interconnection  
3           customer; and

4           (3) Ensure that the cost of utility network upgrades at  
5           and beyond the point of interconnection to the  
6           utility's transmission system shall be the sole  
7           responsibility of the utility transmission provider.

8           ~~[(e)]~~ (d) The commission shall have jurisdiction over  
9 matters concerning interconnection requirements and  
10 interconnections located in the State between electric  
11 utilities, any user, owner, or operator of the Hawaii electric  
12 system, or any other person, business, or entity connecting to  
13 the Hawaii electric system or otherwise applying to connect  
14 generation or equipment providing ancillary services to, or  
15 operate generation and equipment providing ancillary services in  
16 parallel with the Hawaii electric system under processes  
17 established in accordance with section 269-145. Nothing in this  
18 subsection is intended to give the commission general  
19 supervision authority over any user, owner, or operator of the  
20 Hawaii electric system or any other person, business, or entity  
21 that is not a public utility as defined in section 269-1.



1        (e) For purposes of this section:

2        "Generating facility" means the specific device for which  
3 the interconnection customer has requested interconnection.

4        "Interconnection customer" means the owner of the  
5 generating facility that is interconnecting at the utility point  
6 of interconnection at the transmission provider's transmission  
7 system.

8        "Interconnection facilities" means facilities that are  
9 found between the interconnection customer's generating facility  
10 and the utility transmission provider's transmission system.

11        "Transmission provider" means the entity or entities with  
12 which the generating facility is interconnecting.

13        "Utility network upgrades" means facilities at or beyond  
14 the point where the interconnection customer's generating  
15 facility interconnects to the utility transmission provider's  
16 transmission system."

17        SECTION 3. Section 269-145, Hawaii Revised Statutes, is  
18 amended to read as follows:

19        **"[+]§269-145[+] Grid access; procedures for**  
20 **interconnection; dispute resolution. (a) Each user, owner, or**  
21 **operator of the Hawaii electric system, or any other person,**



1 business, or entity seeking to make an interconnection on the  
2 Hawaii electric system shall do so in accordance with procedures  
3 to be established by the commission by rule or order.

4 (b) The commission shall establish interconnection  
5 procedures as follows:

6 (1) The commission shall include in any interconnection  
7 procedures established pursuant to this section  
8 requirements that the electric public utilities:

9 (A) Complete the interconnection design;

10 (B) Reach agreement with the renewable energy project  
11 developer;

12 (C) File a request with the commission for  
13 interconnection or line extension approval, if  
14 required;

15 (D) Meet the requirements under subparagraphs (A)  
16 through (C) as soon as practicable;

17 (E) Meet timelines and deadlines as determined by the  
18 commission; and

19 (F) Submit interim reports to the commission on the  
20 status of the electric public utility's efforts  
21 to comply with the requirements of this



1                   subsection ninety days and one hundred eighty  
2                   days after the renewable energy project power  
3                   purchase agreement is filed with the commission  
4                   for review and approval;

5           (2) If the electric public utility is unable to comply  
6           with the requirements of this subsection, the electric  
7           public utility shall report, in writing, the reasons  
8           for noncompliance to the commission within ten  
9           calendar days after the failure to meet timelines and  
10           deadlines established by the commission;

11           (3) If the electric public utility fails to meet the  
12           requirements established by the commission pursuant to  
13           this subsection, the electric public utility shall  
14           forfeit and return all moneys or other financial  
15           incentives that the electric public utility has  
16           received as part of any performance incentive  
17           mechanism program or similar incentive-based award  
18           recognized by the commission in connection with the  
19           renewable energy project; and

20           (4) The commission shall submit a report to the governor  
21           and legislature regarding any failure to meet the



1           timing under this subsection by any electric public  
2           utility within thirty days of the commission receiving  
3           notice of this failure;  
4   provided that this subsection shall only apply to utility-scale  
5   renewable energy projects that are five megawatts in total  
6   output capacity or larger, and to any community-based renewable  
7   energy projects that the commission has determined to be  
8   responsible for interconnection costs.

9           ~~[(b)]~~ (c) The commission shall have the authority to make  
10 final determinations regarding any dispute between any user,  
11 owner, or operator of the Hawaii electric system, or any other  
12 person, business, or entity connecting to the Hawaii electric  
13 system, concerning either an existing interconnection on the  
14 Hawaii electric system or an interconnection to the Hawaii  
15 electric system created under the processes established by the  
16 commission under this section."

17           SECTION 4. Section 269-146, Hawaii Revised Statutes, is  
18 amended by amending subsection (a) to read as follows:

19           "(a) The commission may require, by rule or order, that  
20 ~~[all]~~ any utilities, persons, businesses, or entities connecting  
21 to the Hawaii electric system, or any other user, owner, or



1 operator of any electric element that is a part of an  
2 interconnection on the Hawaii electric system [~~shall~~] pay a  
3 surcharge that shall be collected by Hawaii's electric  
4 utilities. The commission shall not contract or otherwise  
5 delegate the ability to create the Hawaii electricity  
6 reliability surcharge under this section to any other entity.  
7 This surcharge amount shall be known as the Hawaii electricity  
8 reliability surcharge."

9 SECTION 5. Section 269-147, Hawaii Revised Statutes, is  
10 amended by amending subsection (a) to read as follows:

11 "(a) The commission [~~may~~] shall contract for the  
12 performance of its functions under this part with a person,  
13 business, or organization, except for a public utility as  
14 defined under this chapter, that will serve as the Hawaii  
15 electricity reliability administrator provided for under this  
16 part; provided that the commission shall not contract for the  
17 performance of its functions under sections 269-142(a) and (b)  
18 and 269-146."

19 SECTION 6. Section 269-149, Hawaii Revised Statutes, is  
20 amended to read as follows:



1           " [†] §269-149 [†] **Funding; reporting.** (a) The Hawaii  
2 electricity reliability administrator shall use funds collected  
3 through the Hawaii electricity reliability surcharge provided  
4 for under section 269-146 to carry out its operations, including  
5 administrative, technological, or other related requirements for  
6 effectively ensuring the reliability of the Hawaii electric  
7 system.

8           (b) The Hawaii electricity reliability administrator shall  
9 report to the commission each year on the date of agreement  
10 under section 269-147 following the original contracting between  
11 the Hawaii electricity reliability administrator and the  
12 commission on the status of its operations, financial position,  
13 and a projected operational budget for the fiscal year following  
14 the date of the report.

15           (c) The Hawaii electricity reliability administrator shall  
16 be subject to regulation by the commission under any provision  
17 applicable to a public utility in sections 269-7, 269-8,  
18 269-8.2, 269-8.5, 269-9, 269-10, 269-13, 269-15, 269-19.5, and  
19 269-28. Notwithstanding any other provision of law to the  
20 contrary, the Hawaii electricity reliability administrator shall



1 not be an electric public utility or an electric public utility  
2 affiliate.

3 (d) Within thirty days of receipt of the Hawaii electric  
4 reliability administrator's report submitted to the commission  
5 pursuant to this section, the commission shall submit to the  
6 legislature the report and the commission's assessment of the  
7 status and progress of the Hawaii electric reliability  
8 administrator in achieving and accomplishing the objectives of  
9 this part."

10 SECTION 7. Statutory material to be repealed is bracketed  
11 and stricken. New statutory material is underscored.

12 SECTION 8. This Act shall take effect upon its approval.

13

INTRODUCED BY: Michelle E. Lowen

JAN 20 2023



# H.B. NO. 588

**Report Title:**

Public Utility Commission; Renewable Energy; Reliability Standards; Interconnection Requirements; Interconnection Facilities; Utility Network Upgrades; Hawaii Electricity Reliability Administrator

**Description:**

Requires the Public Utilities Commission to establish reliability standards and interconnection requirements for certain renewable energy projects; provided that any costs for changes in reliability standards or interconnection requirements shall not be the responsibility of the interconnection customer after the interconnection customer's power purchase agreement has been approved by the Public Utilities Commission. Requires the Public Utilities Commission to establish: (1) the distinction between interconnection facilities and utility network upgrades; (2) that the cost of interconnection facilities shall be the responsibility of the interconnection customer; and (3) that the cost of utility network upgrades shall be the sole responsibility of the transmission provider. Establishes a timeline and requirements for interconnection procedures to be established by the Public Utilities Commission for certain utility-scale renewable energy projects. Requires implementation of the Hawaii Electricity Reliability Administrator Law. Requires the Public Utilities Commission to submit a report and assessment of the Hawaii Electric Reliability Administrator to the Legislature.

*The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.*

