
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 pursuant to Act 97,
2 Session Laws of Hawaii 2015, Hawaii has committed to achieving a
3 one hundred percent renewable portfolio standard by December 31,
4 2045. This transition away from imported fossil fuels toward
5 locally available renewable energy sources is critical for
6 ensuring the State's energy independence, economic
7 sustainability, and environmental resilience.

8 The legislature further finds that the transition to a
9 clean energy economy requires customer-friendly processes to
10 enable widespread adoption of distributed energy resources and
11 electrification technologies. Current interconnection and
12 utility service upgrade processes have led to delays, unexpected
13 costs, and increased customer dissatisfaction, hindering
14 progress toward achieving the State's clean energy goals. These
15 challenges also result in localized power quality issues and
16 power outages when customers increase loads without informing
17 the utility.



1 The legislature finds that establishing streamlined and
2 transparent interconnection processes will encourage consumer
3 adoption, enable proactive utility planning, and ensure
4 reliability and cost-effectiveness in the power system. The
5 integration of smart inverters and other customer-sited
6 technologies is critical to minimizing grid investments and
7 achieving a clean, sustainable energy future.

8 Accordingly, the purpose of this Act is to establish a
9 grid-ready home interconnection process that supports the rapid
10 adoption of clean energy technologies, facilitates smart utility
11 investments, and ensures power system reliability.

12 SECTION 2. Section 269-141, Hawaii Revised Statutes, is
13 amended by adding a new definition to be appropriately inserted
14 and to read as follows:

15 "Grid-ready home" means a residential property equipped or
16 modified to anticipate and streamline the integration of clean
17 electrification technologies such as electric vehicle chargers
18 and heat pumps, distributed energy resources such as
19 photovoltaic systems, batteries leveraging current national
20 standards for functionality such as UL 1741, and advanced grid
21 modernization technology."



SECTION 3. Section 269-142, Hawaii Revised Statutes, is amended to read as follows:

"[~~§~~269-142~~]~~ Reliability standards; interconnection requirements; adoption and development; force and effect. (a)

The commission may adopt, by rule or order, reliability standards and interconnection requirements. Reliability standards and interconnection requirements adopted by the commission shall apply to any electric utility and any user, owner, or operator of the Hawaii electric system. The commission shall not contract for the performance of the functions under this subsection to any other entity as provided under section 269-147.

(b) The commission may develop reliability standards and interconnection requirements as it determines necessary or upon recommendation from any entity, including an entity contracted by the commission to serve as the Hawaii electricity reliability administrator provided for under this part, for the continuing reliable design and operation of the Hawaii electric system. Any reliability standard or interconnection requirement developed by the commission shall be adopted by the commission in accordance with subsection (a) [~~in order~~] to be effective.



1 The commission shall not contract for the performance of the
2 functions under this subsection to any other entity as provided
3 under section 269-147.

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

18 (d) No later than January 1, 2026, the commission shall
19 establish a streamlined grid-ready home interconnection process
20 for grid-tied renewable energy generation and storage systems.
21 The process shall include:



- 1 (1) A streamlined notification and approval process for
2 customers seeking to install distributed energy
3 resources systems using UL 1741 or equivalent
4 certified functionality;
- 5 (2) A cost-sharing fee of \$350 to address service upgrades
6 where necessary, to be paid by the asset owner;
- 7 (3) Requirements obligating regulated electric utilities
8 to process notifications and grant interconnection to
9 grid-ready homes within two weeks for systems with
10 electrical permits for the grid-ready improvements
11 that have been approved by the appropriate authority;
- 12 (4) Provisions to allow distributed energy resources
13 operation with managed power export and import where
14 service upgrades are required; provided that the
15 upgrades shall be completed within three months
16 of _____ ;
- 17 (5) Protocols for virtual commissioning and issuing of
18 interconnection agreements within one week of the
19 submission of a commissioning packet; and
- 20 (6) Requirements obligating regulated electric utilities
21 to update their interconnection rules by July 1, 2025,



1 to incorporate vehicle-to-grid compliance requirements
2 to allow for the interconnection and utilization of
3 vehicle-to-grid capabilities, including vehicle-to-
4 home and vehicle-to-grid services; provided that
5 updates to interconnection rules pursuant to this
6 section shall include the recognition of UL 1741
7 supplement C standards and UL 1741 QIKP
8 certification."

9 SECTION 4. Section 269-145, Hawaii Revised Statutes, is
10 amended to read as follows:

11 **"[~~§~~269-145~~]~~ Grid access; procedures for**
12 **interconnection; dispute resolution.** (a) Each user, owner, or
13 operator of the Hawaii electric system, or any other person,
14 business, or entity seeking to make an interconnection on the
15 Hawaii electric system shall do so in accordance with procedures
16 to be established by the commission by rule or order.

17 (b) The commission shall have the authority to make final
18 determinations regarding any dispute between any user, owner, or
19 operator of the Hawaii electric system, or any other person,
20 business, or entity connecting to the Hawaii electric system,
21 concerning either an existing interconnection on the Hawaii



1 electric system or an interconnection to the Hawaii electric
2 system created under the processes established by the commission
3 under this section.

4 (c) In establishing a rule or order for the utility
5 interconnection process for renewable energy and storage systems
6 for grid-ready homes, the commission shall ensure the process:

7 (1) Allows licensed electricians to isolate electrical
8 service at utility meters for meter panel replacement,
9 or main panel upgrades; provided that access shall be
10 subject to:

11 (A) Notification by the utility provider to the owner
12 of the grid-ready home of the planned service
13 disconnection on the morning of the planned
14 service disconnection;

15 (B) Confirmation of passed inspections by the
16 appropriate authority; and

17 (C) Confirmation of reconnection procedures; and

18 (2) Establishes a virtual commissioning process whereby
19 system installers may submit documentation confirming
20 compliance with filed settings and operational



1 requirements of the installed distributed energy
2 resources."

3 SECTION 5. Section 269-145.5, Hawaii Revised Statutes, is
4 amended to read as follows:

5 "**§269-145.5 Advanced grid modernization technology;**
6 **principles.** (a) The commission, in carrying out its
7 responsibilities under this chapter, shall consider the value of
8 improving electrical generation, transmission, and distribution
9 systems and infrastructure within the State through the use of
10 advanced grid modernization technology [~~in order~~] to improve the
11 overall reliability and operational efficiency of the Hawaii
12 electric system.

13 (b) In advancing the public interest, the commission shall
14 balance technical, economic, environmental, and cultural
15 considerations associated with modernization of the electric
16 grid, based on principles that include but are not limited to:

17 (1) Enabling a diverse portfolio of renewable energy
18 resources;

19 (2) Expanding options for customers to manage their energy
20 use;



1 (3) Maximizing interconnection of distributed generation
2 to the State's electric grids on a cost-effective
3 basis at non-discriminatory terms and at just and
4 reasonable rates, while maintaining the reliability of
5 the State's electric grids, and allowing ~~[such]~~ access
6 and rates through applicable rules, orders, and
7 tariffs as reviewed and approved by the commission;

8 (4) Determining fair compensation for electric grid
9 services and other benefits provided to customers and
10 for electric grid services and other benefits provided
11 by distributed generation customers and other non-
12 utility service providers; and

13 (5) Maintaining or enhancing grid reliability and safety
14 through modernization of the State's electric grids.

15 (c) The commission, in carrying out its responsibilities
16 under this chapter, shall ensure the grid-ready home
17 interconnection process aligns with principles of advanced grid
18 modernization technology by:

19 (1) Streamlining customer access to renewable energy,
20 electric vehicle charging, and storage resources;



- 1 (2) Enhancing customer participation in reliance-enhancing
2 energy programs through rapid integration; and
3 (3) Optimizing grid operations to accommodate increased
4 electrification while minimizing infrastructure
5 costs."

6 SECTION 6. Section 269-146, Hawaii Revised Statutes, is
7 amended to read as follows:

8 "[~~§~~269-146~~§~~] **Hawaii electricity reliability surcharge;**
9 **authorization; cost recovery.** (a) The commission may require,
10 by rule or order, that all utilities, persons, businesses, or
11 entities connecting to the Hawaii electric system, or any other
12 user, owner, or operator of any electric element that is a part
13 of an interconnection on the Hawaii electric system shall pay a
14 surcharge that shall be collected by Hawaii's electric
15 utilities. The commission shall not contract or otherwise
16 delegate the ability to create the Hawaii electricity
17 reliability surcharge under this section to any other entity.
18 This surcharge amount shall be known as the Hawaii electricity
19 reliability surcharge.

20 (b) Amounts collected through the Hawaii electricity
21 reliability surcharge shall be transferred in whole or in part



1 to any entity contracted by the commission to act as the Hawaii
2 electricity reliability administrator provided for under this
3 part.

4 (c) The Hawaii electricity reliability surcharge shall be
5 used for the purposes of ensuring the reliable operation of the
6 Hawaii electric system and overseeing grid access on the Hawaii
7 electric system through the activities of the Hawaii electricity
8 reliability administrator contracted under section 269-147;
9 provided that amounts collected under the Hawaii electricity
10 reliability surcharge shall not be available to meet any current
11 or past general obligations of the State.

12 (d) The commission may allow an electric utility to
13 recover appropriate and reasonable costs under the Hawaii
14 electricity reliability surcharge for any interconnection to the
15 Hawaii electric system, including interconnection studies and
16 other analysis associated with studying the impact or necessary
17 infrastructure and operational requirements needed to reliably
18 interconnect a generator, as well as from electric utility
19 customers through a surcharge or assessment subject to review
20 and approval by the commission under section 269-16.



1 (e) The commission may allow the Hawaii electricity
2 reliability administrator contracted under section 269-147, if
3 contracted to perform the commission's functions under section
4 269-142(d), to recover appropriate and reasonable costs under
5 the Hawaii electricity reliability surcharge for the
6 implementation and operation of the grid-ready home
7 interconnection process, including staffing, training, and
8 infrastructure upgrades required to meet the grid-ready home
9 interconnection process's timelines and standards.

10 [~~+~~] (f) Nothing in this section shall create or be
11 construed to cause amounts collected through the Hawaii
12 electricity reliability surcharge to be considered state or
13 public moneys subject to appropriation by the legislature or be
14 required to be deposited into the state treasury."

15 SECTION 7. Section 269-149, Hawaii Revised Statutes, is
16 amended by amending subsection (b) to read as follows:

17 "(b) The Hawaii electricity reliability administrator
18 shall report to the commission each year on the date of
19 agreement under section 269-147 following the original
20 contracting between the Hawaii electricity reliability
21 administrator and the commission on [~~the~~]:



1 (1) The status of its operations, financial position, and
2 a projected operational budget for the fiscal year
3 following the date of the report[-]; and

4 (2) The status, effectiveness, and outcomes of the grid-
5 ready home interconnection process, including:

6 (A) The number of customers served under the process;

7 (B) Average timelines for interconnection approvals
8 and upgrades;

9 (C) Total fees collected by each electric utility
10 under the process;

11 (D) Total costs recovered by each electric utility in
12 service of the process; and

13 (E) Value of infrastructure upgrades deferred or
14 avoided as a result of the process."

15 SECTION 8. Statutory material to be repealed is bracketed
16 and stricken. New statutory material is underscored.

17 SECTION 9. This Act shall take effect on January 1, 2050.



Report Title:

PUC; Renewable Energy; Grid-Ready Homes Interconnection Process;
Vehicle-to-Grid; Hawaii Electricity Reliability Administrator;
Electricity Reliability Surcharge; Report

Description:

Requires the Public Utilities Commission to establish a streamlined grid-ready homes interconnection process, including vehicle-to-grid compliance requirements, by 1/1/2026. Authorizes the use of the Hawaii electricity reliability surcharge for cost recovery of certain expenses of the Hawaii Electricity Reliability Administrator associated with the grid-ready homes interconnection process. Requires a report to the PUC on the grid-ready homes interconnection process. Effective 1/1/2050. (SD1)

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

