
A BILL FOR AN ACT

RELATING TO 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 also finds that establishing streamlined
2 and transparent interconnection processes will encourage
3 consumer 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."



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

3 "[~~§~~269-142~~§~~] **Reliability standards; interconnection**
4 **requirements; adoption and development; force and effect~~[-]~~;**
5 **streamlined grid-ready home interconnection process.** (a) The
6 commission may adopt, by rule or order, reliability standards
7 and interconnection requirements. Reliability standards and
8 interconnection requirements adopted by the commission shall
9 apply to any electric utility and any user, owner, or operator
10 of the Hawaii electric system. The commission shall not
11 contract for the performance of the functions under this
12 subsection to any other entity as provided under section 269-
13 147.

14 (b) The commission may develop reliability standards and
15 interconnection requirements as it determines necessary or upon
16 recommendation from any entity, including an entity contracted
17 by the commission to serve as the Hawaii electricity reliability
18 administrator provided for under this part, for the continuing
19 reliable design and operation of the Hawaii electric system.
20 Any reliability standard or interconnection requirement
21 developed by the commission shall be adopted by the commission



1 in accordance with subsection (a) in order to be effective. The
2 commission shall not contract for the performance of the
3 functions under this subsection to any other entity as provided
4 under section 269-147.

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

19 (d) No later than October 1, 2026, the commission shall
20 establish, for investor-owned electric utility companies, a
21 streamlined grid-ready home interconnection process for grid-



1 tied renewable energy generation and storage systems, including
2 electric vehicle charging. The process shall include:

3 (1) A streamlined notification and approval process for
4 customers seeking to install distributed energy
5 resources systems using UL 1741 or equivalent
6 certified functionality;

7 (2) Service upgrades where necessary, to be paid by the
8 distributed energy resource asset owner;

9 (3) Requirements obligating regulated investor-owned
10 electric utility companies to process notifications
11 and grant interconnection to grid-ready homes within
12 two weeks for systems with electrical permits for the
13 grid-ready improvements that have been approved by the
14 appropriate authority;

15 (4) Provisions to allow distributed energy resources
16 operation with managed power export/import where
17 service upgrades are required;

18 (5) Protocols for virtual commissioning and
19 interconnection agreement issuance within one week of
20 the submission of a commissioning packet; and



1 (6) Requirements obligating regulated investor-owned
2 utility companies to update their interconnection
3 rules by _____, to incorporate vehicle-to-grid
4 compliance requirements to allow for the
5 interconnection and utilization of vehicle-to-grid
6 capabilities, including vehicle-to-home and vehicle-
7 to-grid services; provided that updates to the
8 interconnection rules pursuant to this subsection
9 shall include UL 1741 SC and UL 1741 QIKP
10 certification."

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

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

19 (b) The commission shall have the authority to make final
20 determinations regarding any dispute between any user, owner, or
21 operator of the Hawaii electric system, or any other person,



1 business, or entity connecting to the Hawaii electric system,
2 concerning either an existing interconnection on the Hawaii
3 electric system or an interconnection to the Hawaii electric
4 system created under the processes established by the commission
5 under this section.

6 (c) In establishing a rule or order for the utility
7 interconnection process for renewable energy and storage systems
8 for grid-ready homes pursuant to section 269-142(d), the
9 commission shall ensure the process:

10 (1) Allows licensed electricians to isolate electrical
11 service at utility meters for meter panel replacement,
12 meter socket adapter installation, or main panel
13 upgrades; provided that access shall be subject to:

14 (A) Notification by the utility provider to the owner
15 of the grid-ready home of the planned service
16 disconnection on the morning of the planned
17 service disconnection;

18 (B) Confirmation of passed inspections by the
19 appropriate authority; and

20 (C) Confirmation of reconnection procedures;



- 1 (2) Establishes a virtual commissioning process whereby
2 system installers may submit documentation confirming
3 compliance with filed settings and operational
4 requirements of the installed distributed energy
5 resources; and
- 6 (3) Establishes a process to approve or certify licensed
7 electricians to perform meter panel replacements,
8 meter socket adapter installation, and main panel
9 upgrades covered under the streamlined grid-ready home
10 interconnection process for grid-tied renewable energy
11 generation and storage systems."

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

14 "**§269-145.5 Advanced grid modernization technology;**
15 **principles.** (a) The commission, in carrying out its
16 responsibilities under this chapter, shall consider the value of
17 improving electrical generation, transmission, and distribution
18 systems and infrastructure within the State through the use of
19 advanced grid modernization technology in order to improve the
20 overall reliability and operational efficiency of the Hawaii
21 electric system.



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

- 5 (1) Enabling a diverse portfolio of renewable energy
6 resources;
- 7 (2) Expanding options for customers to manage their energy
8 use;
- 9 (3) Maximizing interconnection of distributed generation
10 to the State's electric grids on a cost-effective
11 basis at non-discriminatory terms and at just and
12 reasonable rates, while maintaining the reliability of
13 the State's electric grids, and allowing such access
14 and rates through applicable rules, orders, and
15 tariffs as reviewed and approved by the commission;
- 16 (4) Determining fair compensation for electric grid
17 services and other benefits provided to customers and
18 for electric grid services and other benefits provided
19 by distributed generation customers and other non-
20 utility service providers; and



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

3 (c) The commission, in carrying out its responsibilities
4 under this chapter, shall ensure the grid-ready home
5 interconnection process pursuant to section 269-142(d), aligns
6 with principles of advanced grid modernization technology by:

- 7 (1) Streamlining customer access to renewable energy,
8 electric vehicle charging, and storage resources;
9 (2) Enhancing customer participation in reliance-enhancing
10 energy programs through rapid integration; and
11 (3) Optimizing grid operations to accommodate increased
12 electrification while minimizing infrastructure
13 costs."

14 SECTION 6. Section 269-149, Hawaii Revised Statutes, is
15 amended by amending subsection (b) to read as follows:

16 "(b) The Hawaii electricity reliability administrator
17 shall report to the [~~commission~~] legislature each year on the
18 date of agreement under section 269-147 following the original
19 contracting between the Hawaii electricity reliability
20 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 the electric utility
- 10 under the process;
- 11 (D) Total costs recovered by the 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 7. Statutory material to be repealed is bracketed
16 and stricken. New statutory material is underscored.

17 SECTION 8. This Act shall take effect on July 1, 3000.

Report Title:

Grid-ready Home Interconnection Process; Renewable Energy;
Public Utilities Commission; Investor-Owned Electric Utility
Company; Electricity Reliability Administrator; Electricity
Reliability Surcharge

Description:

Requires the Public Utilities Commission to establish a
streamlined grid-ready home interconnection process. Requires
the Hawaii Electricity Reliability Administrator to report to
the Legislature on the streamlined grid-ready home
interconnection process. Effective 7/1/3000. (HD2)

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