JAN 17 2025

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,
- 2045. This transition away from imported fossil fuels toward 4
- 5 locally available renewable energy sources is critical for
- 6 ensuring the State's energy independence, economic
- 7 sustainability, and environmental resilience.
- The legislature further finds that the transition to a 8
- 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.
- 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:
- ""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 "[f]\$269-142[f] Reliability standards; interconnection requirements; adoption and development; force and effect. 5 The commission may adopt, by rule or order, reliability 6 standards and interconnection requirements. Reliability 7 standards and interconnection requirements adopted by the 8 commission shall apply to any electric utility and any user, 9 owner, or operator of the Hawaii electric system. 10 commission shall not contract for the performance of the 11 functions under this subsection to any other entity as provided 12 under section 269-147. 13 The commission may develop reliability standards and 14 interconnection requirements as it determines necessary or upon 15 recommendation from any entity, including an entity contracted 16 by the commission to serve as the Hawaii electricity reliability 17 administrator provided for under this part, for the continuing 18 reliable design and operation of the Hawaii electric system. 19 Any reliability standard or interconnection requirement 20 developed by the commission shall be adopted by the commission 21 in accordance with subsection (a) in order to be effective.

- 1 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) Within one hundred eighty days of the effective date
- 19 of this Act, the commission shall establish a streamlined grid-
- 20 ready home interconnection process for grid-tied renewable

1	energy ge	neration and storage systems. The process shall
2	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)	A cost-sharing fee of \$350 to address service upgrades
8		where necessary, to be paid by the asset owner;
9	(3)	Requirements obligating regulated electric utilities
10		to process notifications and grant interconnection to
11		grid-ready homes within two weeks for systems with
12		electrical permits for the grid-ready improvements
13		that have been approved by the appropriate authority;
14	(4)	Provisions to allow distributed energy resources
15		operation with managed power export/import where
16		service upgrades are required; provided that the
17		upgrades shall be completed within three months
18		of ; and
19	(5)	Protocols for virtual commissioning and
20		interconnection agreement issuance within one week of
21		the submission of a commissioning packet."

1 SECTION 4. Section 269-145, Hawaii Revised Statutes, is 2 amended to read as follows: 3 "[+]\$269-145[+] Grid access; procedures for 4 interconnection; dispute resolution. (a) Each user, owner, or 5 operator of the Hawaii electric system, or any other person, 6 business, or entity seeking to make an interconnection on the 7 Hawaii electric system shall do so in accordance with procedures 8 to be established by the commission by rule or order. 9 The commission shall have the authority to make final (b) 10 determinations regarding any dispute between any user, owner, or 11 operator of the Hawaii electric system, or any other person, 12 business, or entity connecting to the Hawaii electric system, 13 concerning either an existing interconnection on the Hawaii 14 electric system or an interconnection to the Hawaii electric 15 system created under the processes established by the commission 16 under this section. **17** (c) In establishing a rule or order for the utility 18 interconnection process for renewable energy and storage systems 19 for grid-ready homes, the commission shall ensure the process:

(1) Allows licensed electricians to isolate electrical

service at utility meters for meter panel replacement,

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1		mete	r socket adapter installation, or main panel
2		upgr	ades; provided that access shall be subject to:
3		(A)	Notification by the utility provider to the owner
4			of the grid-ready home of the planned service
5			disconnection on the morning of the planned
6			service disconnection;
7		<u>(B)</u>	Confirmation of passed inspections by the
8			appropriate authority; and
9		<u>(C)</u>	Confirmation of reconnection procedures; and
10	(2)	<u>Esta</u>	blishes a virtual commissioning process whereby
11		syst	em installers may submit documentation confirming
12		comp	liance with filed settings and operational
13		requ	irements of the installed distributed energy
14		reso	urces."
15	SECT	ION 5	. Section 269-145.5, Hawaii Revised Statutes, is
16	amended t	o rea	d as follows:
17	"§26	9-145	.5 Advanced grid modernization technology;
18	principle	s. (a) The commission, in carrying out its
19	responsib	iliti	es under this chapter, shall consider the value of
20	improving	elec	trical generation, transmission, and distribution
21	systems a	nd in	frastructure within the State through the use of

- 1 advanced grid modernization technology in order to improve the
- 2 overall reliability and operational efficiency of the Hawaii
- 3 electric system.
- 4 (b) In advancing the public interest, the commission shall
- 5 balance technical, economic, environmental, and cultural
- 6 considerations associated with modernization of the electric
- 7 grid, based on principles that include but are not limited to:
- 8 (1) Enabling a diverse portfolio of renewable energy
- 9 resources;
- 10 (2) Expanding options for customers to manage their energy
- 11 use;
- 12 (3) Maximizing interconnection of distributed generation
- to the State's electric grids on a cost-effective
- basis at non-discriminatory terms and at just and
- reasonable rates, while maintaining the reliability of
- 16 the State's electric grids, and allowing such access
- and rates through applicable rules, orders, and
- tariffs as reviewed and approved by the commission;
- 19 (4) Determining fair compensation for electric grid
- 20 services and other benefits provided to customers and
- for electric grid services and other benefits provided

1		by distributed generation customers and other non-
2		utility service providers; and
3	(5)	Maintaining or enhancing grid reliability and safety
4		through modernization of the State's electric grids.
5	(c)	The commission, in carrying out its responsibilities
6	under thi	s chapter, shall ensure the grid-ready home
7	interconn	ection process aligns with principles of advanced grid
8	moderniza	tion technology by:
9	(1)	Streamlining customer access to renewable energy and
10		storage resources;
11	(2)	Enhancing customer participation in reliance-enhancing
12		energy programs through rapid integration; and
13	(3)	Optimizing grid operations to accommodate increased
14		electrification while minimizing infrastructure
15		costs."
16	SECT	ION 6. Section 269-146, Hawaii Revised Statutes, is
17	amended t	o read as follows:
18	"[+]	§269-146[{] Hawaii electricity reliability surcharge;
19	authoriza	tion; cost recovery. (a) The commission may require,
20	by rule o	r order, that all utilities, persons, businesses, or
21	entities	connecting to the Hawaii electric system, or any other

- 1 user, owner, or operator of any electric element that is a part
- 2 of an 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 (b) Amounts collected through the Hawaii electricity
- 10 reliability surcharge shall be transferred in whole or in part
- 11 to any entity contracted by the commission to act as the Hawaii
- 12 electricity reliability administrator provided for under this
- 13 part.
- 14 (c) The Hawaii electricity reliability surcharge shall be
- 15 used for the purposes of ensuring the reliable operation of the
- 16 Hawaii electric system and overseeing grid access on the Hawaii
- 17 electric system through the activities of the Hawaii electricity
- 18 reliability administrator contracted under section 269-147;
- 19 provided that amounts collected under the Hawaii electricity
- 20 reliability surcharge shall not be available to meet any current
- 21 or past general obligations of the State.



1	(d) The commission may allow an electric utility to
2	recover appropriate and reasonable costs under the Hawaii
3	electricity reliability surcharge for any interconnection to the
4	Hawaii electric system, including interconnection studies and
5	other analysis associated with studying the impact or necessary
6	infrastructure and operational requirements needed to reliably
7	interconnect a generator, as well as from electric utility
8	customers through a surcharge or assessment subject to review
9	and approval by the commission under section 269-16.
10	(e) The commission may allow the Hawaii electricity
11	reliability administrator contracted under section 269-147, if
12	contracted to perform the commission's functions under section
13	269-142(d), to recover appropriate and reasonable costs under
14	the Hawaii electricity reliability surcharge for the
15	implementation and operation of the grid-ready home
16	interconnection process, including staffing, training, and
17	infrastructure upgrades required to meet the grid-ready home
18	interconnection process's timelines and standards.
19	$[\frac{(e)}{(e)}]$ Nothing in this section shall create or be
20	construed to cause amounts collected through the Hawaii
21	electricity reliability surcharge to be considered state or

1	public moneys subject to appropriation by the legislature or be				
2	required	to be	deposited into the state treasury."		
3	SECT	ION 7	. Section 269-149, Hawaii Revised Statutes, is		
4	amended b	y ame	nding subsection (b) to read as follows:		
5	"(b)	The	Hawaii electricity reliability administrator		
6	shall report to the commission each year on the date of				
7	agreement under section 269-147 following the original				
8	contracti	ng be	tween the Hawaii electricity reliability		
9	administr	ator	and the commission on [the]:		
10	(1)	The	status of its operations, financial position, and		
11		a pr	ojected operational budget for the fiscal year		
12		foll	owing the date of the report[-]; and		
13	(2)	The	status, effectiveness, and outcomes of the grid-		
14		read	y home interconnection process, including:		
15		<u>(A)</u>	The number of customers served under the process;		
16		(B)	Average timelines for interconnection approvals		
17			and upgrades;		
18		<u>(C)</u>	Total fees collected by the electric utility		
19			under the process;		
20		<u>(D)</u>	Total costs recovered by the electric utility in		
21			service of the process; and		



1	(E) Value of infrastructure upgrades deferred or
2	avoided as a result of the process."
3	SECTION 8. Statutory material to be repealed is bracketed
4	and stricken. New statutory material is underscored.
5	SECTION 9. This Act shall take effect on July 1, 2025.
6	INTRODUCED BY:

Report Title:

Grid-ready Homes Interconnection Process; Renewable Energy; Public Utilities Commission; Electricity Reliability Administrator; Electricity Reliability Surcharge

Description:

Requires the Public Utilities Commission to establish a streamlined grid-ready homes interconnection process. 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 report to the Legislature on the grid-ready homes interconnection process.

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