

JAN 26 2022

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# A BILL FOR AN ACT

RELATING TO ELECTRICAL GRID RELIABILITY.

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

1 PART I

2 SECTION 1. The legislature finds that although the  
3 accelerated development of renewable energy is necessary to  
4 mitigate the effects of climate change, it is equally important  
5 to maintain the reliability of the electrical grid for the  
6 health, safety, and economic well-being of the people of the  
7 State.

8 On December 31, 2021, Hawaiian Electric Company, Inc.  
9 (HECO) issued a statement that asked its customers on Oahu to  
10 conserve power because several of its utility generators were  
11 offline or operating at reduced capacity. At or about this  
12 time, other independent power producers were also experiencing  
13 interruptions or reduced energy generation, due in part to  
14 record-setting weather-related events or a low supply of  
15 resources.

16 At a status conference convened by the public utilities  
17 commission (PUC) on January 21, 2022, HECO reported:



- 1           (1) A projection of a sixty per cent energy reserve margin  
2                   (ERM) for December 2021;
- 3           (2) That it had asked customers on Oahu to conserve power  
4                   because it had scheduled four other HECO generators  
5                   with a total capacity of 282 megawatts to be out of  
6                   operation for planned maintenance at or about  
7                   December 30, 2021; and
- 8           (3) That on 4:30 p.m. on December 31, 2021, various HECO  
9                   generators were derated by 256 megawatts and HECO's  
10                  142-megawatt Kahe Unit 6 generator experienced a  
11                  forced outage.

12           During the status conference, the PUC quoted a letter it  
13           received from HECO on January 14, 2022, which stated that HECO  
14           "currently does not project generation for shortfalls through  
15           the near term", just two weeks after Oahu experienced an energy  
16           shortfall, and expressed concern with the disconnect between the  
17           projections reported and outages occurring on Oahu. The  
18           legislature is also concerned about the electric reliability in  
19           the State, especially since the energy shortfall occurred at a  
20           time when HECO projected a sixty per cent ERM and at a time of  
21           year when energy demand is historically lower.



1           The legislature finds that greater oversight on the  
2 standards and best practices of electric public utilities to  
3 operate and maintain the electrical grid is reasonable and  
4 necessary to assure continued electric reliability as the State  
5 strives to achieve its renewable energy goals. Accordingly, the  
6 purpose of this Act is to:

7           (1) Require the PUC to:

8                   (A) Develop and adopt effective and robust  
9                   reliability standards and best practices for  
10                  electric public utilities to operate and maintain  
11                  the electrical grid, while considering the future  
12                  effects of climate change;

13                  (B) Ensure compliance of the adopted reliability  
14                  standards and best practices; provided that  
15                  electric public utilities in counties with a  
16                  population of less than one hundred thousand  
17                  persons are exempt; and

18                  (C) Submit an annual report to the legislature no  
19                  later than twenty days prior to the convening of  
20                  the regular session;





1 adopted by the commission shall apply to any electric utility  
2 and any user, owner, or operator of the Hawaii electric system;  
3 provided that these reliability standards and best practices  
4 shall not apply to electric public utilities in counties with a  
5 population of less than one hundred thousand persons. The  
6 commission shall not contract for the performance of the  
7 functions under this subsection to any other entity as provided  
8 under section 269-147.

9 (b) The commission may develop additional reliability  
10 standards as it determines necessary or upon recommendation from  
11 any entity, including an entity contracted by the commission to  
12 serve as the Hawaii electricity reliability administrator  
13 provided for under this part, for the continuing reliable design  
14 and operation of the Hawaii electric system. The commission  
15 shall not contract for the performance of the functions under  
16 this subsection to any other entity as provided under section  
17 269-147."

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

20 " ~~[+] §269-142 [ ] — Reliability standards; interconnection]~~  
21 Interconnection requirements; adoption and development; force



1 and effect. (a) The commission may adopt, by rule or order,  
2 [~~reliability standards and~~] interconnection requirements.  
3 [~~Reliability standards and interconnection~~] Interconnection  
4 requirements adopted by the commission shall apply to any  
5 electric utility and any user, owner, or operator of the Hawaii  
6 electric system. The commission shall not contract for the  
7 performance of the functions under this subsection to any other  
8 entity as provided under section 269-147.

9 (b) The commission may develop [~~reliability standards and~~]  
10 interconnection requirements as it determines necessary or upon  
11 recommendation from any entity, including an entity contracted  
12 by the commission to serve as the Hawaii electricity reliability  
13 administrator provided for under this part, for the continuing  
14 reliable design and operation of the Hawaii electric system.  
15 Any [~~reliability standard or~~] interconnection requirement  
16 developed by the commission shall be adopted by the commission  
17 in accordance with subsection (a) in order to be effective. 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           (c) The commission shall have jurisdiction over matters  
2 concerning interconnection requirements and interconnections  
3 located in the State between electric utilities, any user,  
4 owner, or operator of the Hawaii electric system, or any other  
5 person, business, or entity connecting to the Hawaii electric  
6 system or otherwise applying to connect generation or equipment  
7 providing ancillary services to, or operate generation and  
8 equipment providing ancillary services in parallel with the  
9 Hawaii electric system under processes established in accordance  
10 with section 269-145. Nothing in this subsection is intended to  
11 give the commission general supervision authority over any user,  
12 owner, or operator of the Hawaii electric system or any other  
13 person, business, or entity that is not a public utility as  
14 defined in section 269-1."

15           SECTION 4. Section 269-144, Hawaii Revised Statutes, is  
16 amended by amending subsection (a) to read as follows:

17           "(a) The commission shall take all necessary steps,  
18 including audits, spot checks, data requests, report requests,  
19 and internal monitoring procedures, to ensure that any electric  
20 utility, any user, owner, or operator of the Hawaii electric  
21 system, or any other person, business, or entity connecting to



1 the Hawaii electric system is in compliance with all adopted  
2 reliability standards and interconnection requirements, as  
3 appropriate[-]; provided that this section shall not apply to  
4 electric public utilities in counties with a population of less  
5 than one hundred thousand persons."

6 SECTION 5. Section 269-149, Hawaii Revised Statutes, is  
7 amended to read as follows:

8 "[+]§269-149[+] **Funding; reporting.** (a) The Hawaii  
9 electricity reliability administrator shall use funds collected  
10 through the Hawaii electricity reliability surcharge provided  
11 for under section 269-146 to carry out its operations, including  
12 administrative, technological, or other related requirements for  
13 effectively ensuring the reliability of the Hawaii electric  
14 system.

15 (b) The Hawaii electricity reliability administrator shall  
16 report to the commission each year on the date of agreement  
17 under section 269-147 following the original contracting between  
18 the Hawaii electricity reliability administrator and the  
19 commission on the status of its operations, financial position,  
20 and a projected operational budget for the fiscal year following  
21 the date of the report.



1 (c) The Hawaii electricity reliability administrator shall  
2 be subject to regulation by the commission under any provision  
3 applicable to a public utility in sections 269-7, 269-8,  
4 269-8.2, 269-8.5, 269-9, 269-10, 269-13, 269-15, 269-19.5, and  
5 269-28. Notwithstanding any other provision of law to the  
6 contrary, the Hawaii electricity reliability administrator shall  
7 not be an electric public utility or an electric public utility  
8 affiliate.

9 (d) The commission shall submit an annual report of its  
10 findings and recommendations, including any proposed  
11 legislation, to the legislature no later than twenty days prior  
12 to the convening of the regular session. The report shall  
13 include detailed information regarding the commission's efforts  
14 to implement section 269- ."

15 PART III

16 SECTION 6. Section 226-18, Hawaii Revised Statutes, is  
17 amended by amending subsection (a) to read as follows:

18 "(a) Planning for the State's facility systems with regard  
19 to energy shall be directed toward the achievement of the  
20 following objectives, giving due consideration to all:



- 1           (1) Dependable, efficient, and economical statewide energy
- 2                 systems capable of supporting the needs of the people;
- 3           (2) Increased energy security and self-sufficiency through
- 4                 the reduction and ultimate elimination of Hawaii's
- 5                 dependence on imported fuels for electrical generation
- 6                 and ground transportation;
- 7           (3) Greater diversification of energy generation in the
- 8                 face of threats to Hawaii's energy supplies and
- 9                 systems;
- 10          (4) Reduction, avoidance, or sequestration of greenhouse
- 11                 gas emissions from energy supply and use; [~~and~~]
- 12          (5) Utility models that make the social and financial
- 13                 interests of Hawaii's utility customers a priority[~~-~~];
- 14                 and
- 15          (6) Reliability standards and best practices adopted by
- 16                 the public utilities commission pursuant to section
- 17                 269- ."

18           SECTION 7. Section 226-109, Hawaii Revised Statutes, is  
19 amended to read as follows:

20           " ~~[+]~~ §226-109 ~~[+]~~ **Climate change adaptation priority**  
21 **guidelines.** Priority guidelines to prepare the State to address



1 the impacts of climate change, including impacts to the areas of  
2 agriculture; conservation lands; coastal and nearshore marine  
3 areas; natural and cultural resources; education; energy; higher  
4 education; health; historic preservation; water resources; the  
5 built environment, such as housing[7]; recreation[7];  
6 transportation; and the economy, shall:

- 7 (1) Ensure that Hawaii's people are educated, informed,  
8 and aware of the impacts climate change may have on  
9 their communities;
- 10 (2) Encourage community stewardship groups and local  
11 stakeholders to participate in planning and  
12 implementation of climate change policies;
- 13 (3) Invest in continued monitoring and research of  
14 Hawaii's climate and the impacts of climate change on  
15 the State;
- 16 (4) Consider native Hawaiian traditional knowledge and  
17 practices in planning for the impacts of climate  
18 change;
- 19 (5) Encourage the preservation and restoration of natural  
20 landscape features, such as coral reefs, beaches and  
21 dunes, forests, streams, floodplains, and wetlands,



- 1           that have the inherent capacity to avoid, minimize, or  
2           mitigate the impacts of climate change;
- 3           (6) Explore adaptation strategies that moderate harm or  
4           exploit beneficial opportunities in response to actual  
5           or expected climate change impacts to the natural and  
6           built environments;
- 7           (7) Promote sector resilience in areas such as water,  
8           roads, airports, and public health, by encouraging the  
9           identification of climate change threats, assessment  
10          of potential consequences, and evaluation of  
11          adaptation options;
- 12          (8) Foster cross-jurisdictional collaboration between  
13          county, state, and federal agencies and partnerships  
14          between government and private entities and other  
15          nongovernmental entities, including nonprofit  
16          entities;
- 17          (9) Use management and implementation approaches that  
18          encourage the continual collection, evaluation, and  
19          integration of new information and strategies into new  
20          and existing practices, policies, and plans; [~~and~~]



- 1 (10) Encourage planning and management of the natural and
- 2 built environments that effectively integrate climate
- 3 change policy[-]; and
- 4 (11) Use the reliability standards and best practices
- 5 adopted by the public utilities commission pursuant to
- 6 section 269- ."

7 SECTION 8. There is appropriated out of the general  
 8 revenues of the State of Hawaii the sum of \$ or so  
 9 much thereof as may be necessary for fiscal year 2022-2023 to  
 10 revise the state energy functional plan as required by part III  
 11 of this Act.

12 The sum appropriated shall be expended by the office of  
 13 planning and sustainable development for the purposes of this  
 14 Act.

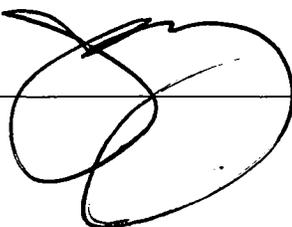
PART IV

16 SECTION 9. Statutory material to be repealed is bracketed  
 17 and stricken. New statutory material is underscored.

18 SECTION 10. This Act shall take effect its upon approval,  
 19 provided that section 8 of this Act take effect on July 1, 2022.

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INTRODUCED BY:


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# S.B. NO. 3315

**Report Title:**

Electric Grids; Reliability Standards; Best Practices; Public Utilities Commission; State Planning Act; Energy Functional Plan; Office of Planning and Sustainable Development; Appropriation

**Description:**

Requires the Public Utilities Commission (PUC) to develop and adopt effective and robust reliability standards and best practices for electric public utilities to operate and maintain the electrical grid, while considering the future effects of climate change. Ensures compliance of the adopted reliability standards and best practices; provided that electric public utilities in counties with a population of less than 100,000 persons are exempt. Requires the PUC to submit an annual report to the Legislature no later than twenty days prior to the convening of the regular session. Requires all state agencies to consider and use the reliability standards and best practices that the PUC develops and adopts when planning the State's facility systems. Appropriates funds.

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

