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# A BILL FOR AN ACT

RELATING TO RESILIENCY.

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

1       SECTION 1. The legislature finds that Hawaii's residents  
2 and businesses are vulnerable to disruptions in the islands'  
3 energy systems caused by extreme weather events or other  
4 disasters. In 2017, Puerto Rico was devastated by Hurricane  
5 Maria, leaving ninety per cent of the island's residents without  
6 power one month after the storm hit. Puerto Rico is now  
7 rebuilding its energy system and incorporating microgrids, or  
8 smaller grids with local control capability that can disconnect  
9 from the larger electricity grid and operate autonomously.

10       The legislature finds that the increased use of renewable  
11 energy, advanced distributed energy resources, and energy  
12 efficiency in Hawaii provides significant economic, health,  
13 environmental, and workforce benefits to the State. Microgrids  
14 can facilitate the achievement of Hawaii's clean energy policies  
15 by enabling the integration of higher levels of renewable energy  
16 and advanced distributed energy resources. Microgrids can also  
17 provide valuable services to the public utility electricity



1 grid, including energy storage and demand response, to support  
2 load shifting, frequency response, and voltage control, among  
3 other ancillary services.

4 The legislature finds that microgrids can isolate  
5 themselves from the larger electricity grid in a time of  
6 emergency. By "islanding" and running autonomously, microgrids  
7 can provide a building or set of buildings with emergency power  
8 for critical medical equipment, refrigeration, and charging  
9 critical communications devices. Microgrids can also provide  
10 backup power for hospitals and emergency centers. The  
11 legislature believes that the use of microgrids would build  
12 energy resiliency into our communities, thereby increasing  
13 public safety and security.

14 The legislature finds that while Hawaii is a national  
15 leader in developing renewable energy, few microgrids have been  
16 developed, as their development has been inhibited by a number  
17 of factors, including interconnection barriers and a lack of  
18 standard terms regarding the value of services exchanged between  
19 the microgrid operator and the utility.



1       The legislature further finds that without standard terms  
2 regarding interconnection and the value of microgrid services,  
3 businesses and residents developing microgrids may choose to  
4 leave the utility grid altogether, thereby weakening the overall  
5 system and increasing costs for other utility customers.

6       The purpose of this Act is to encourage and facilitate the  
7 development and use of microgrids through the establishment of a  
8 standard microgrid services tariff.

9       SECTION 2. Chapter 269, Hawaii Revised Statutes, is  
10 amended by adding a new section to part I to be appropriately  
11 designated and to read as follows:

12       "§269-       Microgrids. (a) By July 1, 2018, the public  
13 utilities commission shall open a proceeding to establish a  
14 microgrid services tariff.

15       (b) Any person or entity may own or operate an eligible  
16 microgrid project or projects provided that the person or entity  
17 complies with all applicable statutes, rules, tariffs, and  
18 orders governing the ownership and interconnection of the  
19 project or projects.



1       (c) As used in this section:

2       "Microgrid project" means a group of interconnected loads  
3 and distributed energy resources within clearly defined  
4 electrical boundaries that acts as a single controllable entity  
5 with respect to the utility's electrical grid and can connect to  
6 a public utility's electrical grid to operate in grid-connected  
7 mode and can disconnect from the grid to operate in island mode,  
8 and that:

9       (1) Is subject to a microgrid services tariff; and

10      (2) Generates or produces energy.

11      "Microgrid services tariff" means a tariff approved by the  
12 public utilities commission that:

13      (1) Is designed to provide fair compensation for  
14 electricity, electric grid services, and other  
15 benefits provided to, or by, the electric utility, the  
16 person or entity operating the microgrid, and other  
17 ratepayers; and

18      (2) To the extent possible, standardizes and streamlines  
19 the related interconnection processes for microgrid  
20 projects."

21      SECTION 3. New statutory material is underscored.



1 SECTION 4. This Act shall take effect upon its approval.

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# H.B. NO. 2110

**Report Title:**

Energy Resiliency; Microgrid Services Tariff

**Description:**

Directs the public utilities commission to establish a microgrid services tariff or tariffs to encourage and facilitate the development and use of energy resilient microgrids.

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