
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."



1 SECTION 3. In establishing a microgrid services tariff,
2 the public utilities commission shall consider the actions taken
3 to establish and deploy microgrids in Puerto Rico following the
4 2017 Atlantic hurricane season and the preemptive steps the
5 State can take to address a potential similar local disaster in
6 the future.

7 SECTION 4. New statutory material is underscored.

8 SECTION 5. This Act shall take effect upon its approval.



Report Title:

Energy Resiliency; Microgrid Services Tariff

Description:

Directs the Public Utilities Commission to establish a microgrid services tariff to encourage and facilitate the development and use of energy resilient microgrids. (HB2110 HD1)

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