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# A BILL FOR AN ACT

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RELATING TO MICROGRIDS.

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

1       SECTION 1. The legislature finds that the development of  
2 renewable microgrids can aid Hawaii's transition to a clean  
3 energy economy. In this context, a microgrid is a small energy  
4 network, interconnected with an electric utility grid, or  
5 utilizing an electric utility grid, which is powered by  
6 renewable energy, and which may be islanded from the electric  
7 utility grid if needed.

8       The legislature further finds that microgrids have the  
9 potential to be a testing ground for greater integration of  
10 renewable energy, distributed generation, storage, and demand  
11 response technology. Microgrid demonstration projects will  
12 enable the State to learn how to reduce costs, increase grid  
13 reliability and resiliency, reduce pollution and greenhouse gas  
14 emissions, reduce the cost of infrastructure, and increase the  
15 efficiency of transmission and distribution.

16       The purpose of this Act is to designate and establish  
17 requirements for a microgrid demonstration project at the



1 natural energy laboratory of Hawaii authority that can assist in  
2 understanding, developing, and refining microgrid technologies  
3 and policies in the State.

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

7 "§269- Microgrid demonstration project; natural energy  
8 laboratory of Hawaii authority. (a) The property controlled by  
9 the natural energy laboratory of Hawaii authority, established  
10 pursuant to chapter 227D, is designated as a microgrid  
11 demonstration project.

12 (b) The microgrid demonstration project designated by this  
13 section:

14 (1) Shall be authorized by the public utilities  
15 commission;

16 (2) May cross property boundaries, easements, public  
17 thoroughfares, transportation rights-of-way, and  
18 utility rights-of-way solely within the natural energy  
19 laboratory of Hawaii authority property;

20 (3) May provide, sell, or transmit renewable energy to  
21 tenants or other users of the natural energy



1 laboratory of Hawaii authority other than the person  
2 who owns, controls, operates, or manages the natural  
3 energy laboratory of Hawaii authority microgrid  
4 demonstration project;

5 (4) May use portions of an electric public utility's  
6 transmission or distribution lines to provide, sell,  
7 or transmit electricity to participants in the natural  
8 energy laboratory of Hawaii authority microgrid  
9 demonstration project;

10 (5) Shall use electricity generation, located on the  
11 natural energy laboratory of Hawaii authority  
12 microgrid demonstration project, with a total  
13 generating capacity of five megawatts or less;

14 (6) Shall use only renewable energy, as defined in section  
15 269-91, to generate electricity, except in cases of  
16 emergency; and

17 (7) May be islanded from the electric public utility grid  
18 from time to time.

19 (c) Notwithstanding any other provisions in this chapter,  
20 the natural energy laboratory of Hawaii authority microgrid  
21 demonstration project shall be exempt from the requirements of



1 this chapter, except as may be needed to facilitate safe  
2 interconnection of the natural energy laboratory of Hawaii  
3 authority microgrid demonstration project to an electric public  
4 utility grid. Any person who owns, controls, operates, manages,  
5 or otherwise participates in the natural energy laboratory of  
6 Hawaii authority microgrid demonstration project shall not be  
7 considered a public utility for the purpose of participating in  
8 the natural energy laboratory of Hawaii authority microgrid  
9 demonstration project.

10 (d) The public utilities commission may take any steps the  
11 commission deems necessary to enable and compel electric public  
12 utilities to allow the development of the natural energy  
13 laboratory of Hawaii authority microgrid demonstration project  
14 by non-utilities. These steps may include issuing related  
15 orders, amending or adopting related rules, working with  
16 permitting agencies or other authorities to grant exemptions, or  
17 other steps necessary to enable the development of the natural  
18 energy laboratory of Hawaii authority microgrid demonstration  
19 project.

20 (e) The natural energy laboratory of Hawaii authority  
21 microgrid demonstration project shall be exempt from any



1 wheeling restrictions when the wheeling is conducted within the  
2 designated boundaries of the project.

3 (f) Any power that is sold by the natural energy  
4 laboratory of Hawaii authority microgrid demonstration project  
5 shall be at a price equal to or less than the electric utility  
6 rates established by the public utilities commission.

7 (g) No later than twenty days prior to the convening of  
8 the regular session of 2019, the natural energy laboratory of  
9 Hawaii authority microgrid demonstration project designated  
10 pursuant to subsection (a) shall submit a report to the  
11 legislature of its findings and recommendations on the natural  
12 energy laboratory of Hawaii authority microgrid demonstration  
13 project. At a minimum, the report shall contain information on:

14 (1) The fairness of the natural energy laboratory of  
15 Hawaii authority microgrid demonstration project to  
16 all customers given the increased options for  
17 obtaining electrical power;

18 (2) Any safety issues when operating the integrated energy  
19 district;



1       (3) Reliability of the overall electrical system in  
2       relation to the natural energy laboratory of Hawaii  
3       authority microgrid demonstration project; and

4       (4) Any cost shifting issues realized as a result of  
5       electrical energy being provided by the natural energy  
6       laboratory of Hawaii authority microgrid demonstration  
7       project.

8       (h) For the purposes of this section, the "natural energy  
9       laboratory of Hawaii authority microgrid demonstration project"  
10      means a group of interconnected loads and distributed energy  
11      resources within clearly defined electrical boundaries that acts  
12      as a single controllable entity with respect to the utility's  
13      electrical grid and can connect to a public utility's electrical  
14      grid to operate in grid-connected mode and can disconnect from  
15      the grid to operate in island mode, and generates and produces  
16      energy, that is solely located on property owned by the natural  
17      energy laboratory of Hawaii authority."

18       SECTION 3. New statutory material is underscored.

19       SECTION 4. This Act shall take effect on July 1, 2018.

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INTRODUCED BY:

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**Report Title:**

Renewable Energy; Microgrid Demonstration Projects

**Description:**

Authorizes the establishment of a Natural Energy Laboratory of Hawaii Authority (NELHA) microgrid demonstration project for the generation, storage, and distribution of renewable energy on property controlled by NELHA.

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

