THE SENATE THIRTIETH LEGISLATURE, 2020 STATE OF HAWAII S.B. NO. 2802

JAN 2 3 2020

## A BILL FOR AN ACT

RELATING TO WIND TURBINES.

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

1 SECTION 1. The legislature finds that lights atop wind turbines are disruptive to the environment. The safety lights, 2 known as obstruction lighting, create light pollution at night, 3 4 either disturbing sleep patterns or creating an impediment to a clear night sky. Technology is available that balances 5 obstruction lighting requirements placed on wind farms by civil 6 aviation authorities, against the nuisance light concerns of 7 local communities. Available aircraft lighting detection 8 systems include radar-activated technologies that are designed 9 to activate blinking lights on wind turbines based on the 10 presence of aircraft in the vicinity. Conversely, once the 11 aircraft leaves the vicinity, the lights are deactivated. 12 Such aircraft lighting detection systems have been approved by the 13 Federal Aviation Administration, and are operational within the 14 United States on windfarms in North Dakota and abroad in Germany 15 16 and Denmark.



1

S.B. NO. 2802

2

1	The purpose of this Act is to require the installation of
2	aircraft lighting detection systems on all wind turbines that
3	have obstruction lighting and to ensure that future wind
4	turbines are similarly equipped.
5	SECTION 2. Chapter 196, Hawaii Revised Statutes, is
6	amended by adding a new section to be appropriately designated
7	and to read as follows:
8	<pre>"§196- Wind turbines; installation and maintenance of</pre>
9	lighting systems. (a) Every wind turbine that is equipped with
10	obstruction lighting that is located within five miles of a
11	residential community shall be equipped with a sensor-based
12	aircraft lighting detection system that:
13	(1) Uses passive radar sensors to detect approaching
14	aircraft; and
15	(2) Automatically activates the obstruction lights until
16	the lights are no longer needed by the aircraft.
17	An aircraft detection lighting system may include features that
18	transmit warning messages directly to the pilot and provides
19	additional information regarding an obstruction when the
20	aircraft is approaching.



Page 2

# S.B. NO. 2802

1	(b) Any cost associated with installation, implementation,
2	operation, and maintenance of these systems shall be the sole
3	responsibility of a turbine owner.
4	(c) Subsection (a) shall apply to all wind turbines,
5	including those in existence prior to the effective date of this
6	Act. Existing wind turbines shall install an aircraft detection
7	lighting system no later than two years from the effective date
8	of this Act."
9	SECTION 3. New statutory material is underscored.
10	SECTION 4. This Act shall take effect upon its approval.
11	0

INTRODUCED BY: Sil liviere

Romby & Brh Kut Ferella Amore Marcolo Ko w Shall: Ċ and the

## S.B. NO. 2802

### Report Title:

Wind Turbines; Obstruction Lighting; Aircraft Detection Systems

#### Description:

Requires all wind turbines that are equipped with obstruction lighting and located within five miles of a residential community to be equipped with aircraft detection lighting systems.

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

