

DAVID Y. IGE GOVERNOR

July 11, 2017 GOV. MSG. NO. 12 99

The Honorable Ronald D. Kouchi,
President
and Members of the Senate
Twenty-Ninth State Legislature
State Capitol, Room 409
Honolulu, Hawai'i 96813

The Honorable Scott K. Saiki, Speaker and Members of the House of Representatives Twenty-Ninth State Legislature State Capitol, Room 431 Honolulu, Hawai'i 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

This is to inform you that on July 11, 2017, the following bill was signed into law:

HB427 HD2 SD1 CD1

RELATING TO DARK NIGHT SKIES PROTECTION ACT 185 (17)

Sincerely,

DAVID Y. IGE

Governor, State of Hawai'i

ON JUL 11 2017
HOUSE OF REPRESENTATIVES
TWENTY-NINTH LEGISLATURE, 2017
STATE OF HAWAII

ACT 185
427
H.B. NO. H.D. 2
S.D. 1
C.D. 1

# A BILL FOR AN ACT

RELATING TO DARK NIGHT SKIES PROTECTION.

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

- 1 SECTION 1. The legislature finds that dark night skies
- 2 hold important cultural, scientific, astronomical, natural,
- 3 landscape, and tourism related value. Light pollution caused by
- 4 the excessive, misdirected, or obtrusive use of artificial light
- 5 has become a worldwide problem, and is now posing significant
- 6 challenges for the State. The inappropriate use of lighting at
- 7 night includes over-illumination, with the excessive use of
- 8 artificial light, use of fixtures that direct light upward that
- 9 causes glare and sky glow, and use of fixtures that have
- 10 excessive amounts of blue light.
- 11 Light pollution is a statewide issue because light travels
- 12 far distances. For example, the western part of Molokai has a
- 13 much brighter night sky than the eastern part because of the sky
- 14 glow from Oahu; and the sky glow from Oahu is easily visible
- 15 from Haleakala and interferes with astronomical observations in
- 16 the western part of the sky.
- 17 Light at night interferes with various species of animals,
- 18 including threatened and endangered birds and turtles. The

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- 1 historical use of poorly designed light fixtures has required
- 2 very costly retrofits to reduce the impact on these species.
- 3 Light at night, particularly blue light, also interferes with
- 4 circadian rhythms, including those in humans. The World Health
- 5 Organization has listed "shift work" that involves circadian
- 6 disruption as a probable carcinogen. Research suggests that
- 7 light intrusion, even if dim, is likely to have measurable
- 8 effects on sleep disruption and melatonin suppression. Even if
- 9 these effects may be relatively small from night to night,
- 10 continuous chronic circadian sleep and hormonal disruption may
- 11 have longer-term health risks.
- 12 Another consideration concerning night light is the cost
- 13 involved. Nighttime illumination of state highways, harbors,
- 14 airports, and other facilities is costly and consumes large
- 15 amounts of energy. Application of new lighting technologies may
- 16 produce substantial energy and cost savings.
- 17 The legislature further finds that the preservation of the
- 18 State's dark night skies is essential to the State's well-being
- 19 and that the State needs a statewide coordinated strategy to
- 20 address this issue.

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- 1 The purpose of this Act is to preserve dark night skies in
- 2 Hawaii by establishing a dark night skies protection advisory
- 3 committee.
- 4 SECTION 2. (a) There is established the dark night skies
- 5 protection advisory committee to assist the University of Hawaii
- 6 in developing a statewide dark night skies protection strategy.
- 7 The advisory committee shall be placed within the University of
- 8 Hawaii for administrative purposes.
- 9 (b) The members of the advisory committee shall consist of
- 10 the following thirteen persons or their designees:
- 11 (1) The president of the University of Hawaii;
- 12 (2) The comptroller;
- 13 (3) The director of business, economic development, and
- 14 tourism;
- 15 (4) The director of health;
- 16 (5) The director of transportation;
- 17 (6) The chairperson of the board of land and natural
- 18 resources;
- 19 (7) The mayor of each county;
- 20 (8) The administrator of the Office of Hawaiian Affairs;

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1	(9)	The director of the university of hawait institute to								
2		astronomy; and								
3	(10)	A representative of the University of Hawaii at Hilo.								
4	The presi	dent of the University of Hawaii shall designate a								
5	chairperson from among the members of the advisory committee.									
6	(c)	The chairperson of the advisory committee may invite								
7	interested parties to advise the advisory committee, including									
8	(1)	A representative from the United States Fish and								
9		Wildlife Service;								
10	(2)	A representative from the United States military, to								
11		be appointed by the Commander of the United States								
12	•	Pacific Command;								
13	(3)	A representative from the Federal Aviation								
14		Administration;								
15	(4)	A representative from the United States Coast Guard;								
16	(5)	A representative from the Federal Highway								
17		Administration;								
18	(6)	A representative from the Occupational Safety and								
19		Health Administration;								
20	(7)	A member of the Hawaiian Astronomical Society; and								
21	(8)	A lighting engineer.								

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1	(d)	In developing the dark night skies protection								
2	strategy,	the advisory committee shall consider and evaluate								
3	issues th	chat include:								
4	(1)	Reduction of light pollution in the State;								
5	(2)	Methods to conserve energy;								
6	(3)	Cultural, scientific, astronomical, natural, tourism,								
7		and landscape related values associated with dark								
8		night skies;								
9	(4)	Protection of threatened and endangered species that								
10		are affected by artificial light;								
11	(5)	Impacts of light pollution on astronomical								
12	•	observations from Mauna Kea, Mauna Loa, and Haleakala;								
13	(6)	Educational uses of the dark night sky by K-12 and								
14		higher education students;								
15	(7)	Establishment of dark night sky parks, which are								
16		designated locations that have special protections for								
17		the night sky and are locations where residents and								
18		visitors can view the night sky with minimal								
19		interference from artificial light;								
20	(8)	Statewide monitoring of light pollution to monitor								
21		light pollution levels and long-term trends;								

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1	(9)	Public	safety	issues	related	to	the	reduction	in
2		artific	ial lic	aht; and	<b>1</b>				

- 3 (10) Any additional considerations that the advisory
  4 committee believes will help to protect dark night
  5 skies in the State.
- (e) In conjunction with developing the statewide dark
  night skies protection strategy, the advisory committee shall
  consult with the United States Fish and Wildlife Service.
- 9 (f) Members of the advisory committee shall not be
  10 compensated but shall be reimbursed by their respective
  11 organization for necessary expenses incurred, including travel
  12 expenses, in carrying out their duties. The University of
  13 Hawaii shall provide all necessary administrative, professional,
  14 technical, and clerical support required by the advisory
  15 committee.
- 16 (g) As used in this Act, "advisory committee" means the 17 dark night skies protection advisory committee.
- 18 (h) The advisory committee shall be dissolved on June 30,19 2027.
- 20 SECTION 3. The University of Hawaii shall report its
  21 initial findings and recommendations, including any proposed

- 1 legislation, to the legislature no later than twenty days prior
- 2 to the convening of the regular session of 2018. The advisory
- 3 committee shall report its updated findings and recommendations,
- 4 including any proposed legislation, to the legislature no later
- 5 than twenty days prior to the convening of each regular session
- 6 of 2019, 2020, and 2021.
- 7 SECTION 4. This Act shall take effect upon its approval.

APPROVED this 11 day of JUL , 2017

GOVERNOR OF THE STATE OF HAWAII

## THE HOUSE OF REPRESENTATIVES OF THE STATE OF HAWAII

Date: May 2, 2017 Honolulu, Hawaii

We hereby certify that the above-referenced Bill on this day passed Final Reading in the House of Representatives of the Twenty-Ninth Legislature of the State of Hawaii, Regular Session of 2017.

Joseph M. Souki

Speaker

House of Representatives

Brian L. Takeshita

Chief Clerk

House of Representatives

## THE SENATE OF THE STATE OF HAWAII

Date: May 2, 2017 Honolulu, Hawaii 96813

We hereby certify that the foregoing Bill this day passed Final Reading in the Senate of the Twenty-ninth Legislature of the State of Hawaii, Regular Session of 2017.

President of the Senate

Clerk of the Senate