

JAN 19 2018

A BILL FOR AN ACT

RELATING TO ENERGY EFFICIENCY.

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

1 SECTION 1. The legislature finds that Act 204, Session
2 Laws of Hawaii 2008 (Act 204), was enacted for the benefit of
3 consumers, requiring that new single-family homes be built with
4 a solar water heater system except in limited circumstances.
5 The idea behind requiring solar water heaters was to lower
6 energy costs for consumers. That Act, known as the "solar water
7 heater mandate", also created a variance process for single-
8 family dwellings that do not include a solar water heater system
9 that meets the standards; a single family dwelling can be built
10 without a solar water heater if:

11 (1) Installation is impractical due to poor solar
12 resource;

13 (2) Installation is cost-prohibitive based upon a life
14 cycle cost-benefit analysis;

15 (3) A renewable energy technology system, such as a solar
16 photovoltaic system, is substituted for use as the
17 primary energy source for heating water; or



1 (4) A demand water heater device approved by Underwriter
2 Laboratories, Inc., is installed; provided that at
3 least one other gas appliance is installed in the
4 dwelling.

5 The legislature quickly found that the variance provisions
6 of Act 204 could be used to circumvent the objectives of Act 204
7 to the detriment of consumers, and attempted to clarify certain
8 elements of the solar water heater mandate with part VII of Act
9 155, Session Laws of Hawaii 2009 (Act 155). In Act 155, the
10 legislature clarified that the legislature "intended for a
11 consumer to have the option to use gas appliances with the full
12 knowledge that such a system may be more costly and less
13 efficient". The legislature further noted that in order to
14 reduce attempts to circumvent Act 204, "if the potential
15 variance applicant is not the party who will ultimately pay for
16 the energy cost consumption, then only [variance exceptions (1),
17 (2), or (3) under the solar water mandate] should apply".

18 Despite the intent and additional clarification that
19 variances granted under the solar water heater mandate be
20 "rarely granted" and that variances based on the "demand water
21 heater device" provision be even rarer, the legislature finds



1 that the variance process is being used to circumvent the
2 legislature's objectives, particularly with respect to the
3 "demand water heater device". Through December 2017, of the
4 approximately 5,600 variance requests filed, almost all have
5 been granted, and over 5,100 of those filed requests have been
6 for demand water heaters. Furthermore, the variance process is
7 being misused such that it is providing benefits to unintended
8 beneficiaries - over two thousand of the variance requests have
9 been submitted by a single architect who ultimately does not
10 incur the costs for energy consumption.

11 The legislature therefore finds that it is necessary to
12 amend the solar water heater mandate to implement the intent of
13 Acts 204 and 155 to better protect consumers. This need is
14 particularly sharp at a time when substantial new residential
15 tracts are being developed.

16 Accordingly, the purpose of this Act is to provide
17 housekeeping amendments to close the loophole allowing
18 applicants to circumvent the legislature's stated objectives for
19 solar water heating systems and ensure that the variance for a
20 demand water heater may only be granted if a solar water heater
21 or other renewable energy technology system is impracticable and



1 cost-prohibitive. In addition, a request for a variance for a
2 demand water heater may only be granted if the applicant attests
3 that the applicant will also be the resident-owner of the home.

4 SECTION 2. Section 196-6.5, Hawaii Revised Statutes, is
5 amended to read as follows:

6 "§196-6.5 Solar water heater system required for new
7 single-family residential construction. (a) On or after
8 January 1, 2010, no building permit shall be issued for a new
9 single-family dwelling that does not include a solar water
10 heater system that meets the standards established pursuant to
11 section 269-44, unless the coordinator approves a variance. A
12 variance application shall only be accepted if [~~submitted~~]
13 signed by an architect or mechanical engineer licensed under
14 chapter 464, who attests that:

15 (1) Installation is impracticable due to poor solar
16 resource;

17 (2) Installation is cost-prohibitive based upon a life
18 cycle cost-benefit analysis that incorporates the
19 average residential utility bill and the cost of the
20 new solar water heater system with a life cycle that
21 does not exceed fifteen years;



(3) A renewable energy technology system, as defined in section 235-12.5, is substituted for use as the primary energy source for heating water; or

(4) A demand water heater device approved by Underwriters Laboratories, Inc., is installed; provided that at least one other gas appliance is installed in the dwelling. For the purposes of this paragraph, "demand water heater" means a renewable gas-tankless instantaneous water heater that provides hot water only as it is needed[+] and has a Uniform Energy Factor of 0.93 or higher.

(b) All applications for variance under subsection (a)(4) shall also:

(1) Be signed by the applicant who shall be the owner and occupant of the dwelling and shall attest that the applicant shall pay the energy costs for heating water in the home; and

(2) Include an attestation by an architect or mechanical engineer licensed under chapter 464 demonstrating that installing a renewable energy technology system under subsection (a)(3) would be impracticable due to poor



1 exposure to a renewable source of energy, like solar
2 or wind energy, and cost-prohibitive based upon a life
3 cycle cost-benefit analysis that incorporates the
4 average residential utility bill and the cost of the
5 new renewable energy technology system with a life
6 cycle that does not exceed fifteen years.

7 ~~[(b)]~~ (c) A request for a variance shall be submitted to
8 the coordinator on an application prescribed by the coordinator
9 and shall include a description of the location of the property
10 and justification for the approval of a variance using the
11 criteria established in ~~[subsection]~~ subsections (a) ~~[-]~~ and (b).
12 The coordinator may exercise discretion in denying any variance
13 application deemed incomplete or insufficient to satisfy the
14 criteria in subsections (a) and (b). A variance shall be deemed
15 approved if not denied within thirty working days after receipt
16 of the variance application. The coordinator shall publicize:

- 17 (1) All applications for a variance within seven days
18 after receipt of the variance application; and
19 (2) The disposition of all applications for a variance
20 within seven days of the determination of the variance
21 application.



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1 ~~[(e)]~~ (d) The director of business, economic development,
2 and tourism may adopt rules pursuant to chapter 91 to ~~[impose]~~:

3 (1) Impose and collect fees to cover the costs of
4 administering variances under this section~~[-]~~; and

5 (2) Impose appropriate fines or penalties for false
6 attestations in variance applications.

7 The fees~~[-]~~ and fines, if any, shall be deposited into the
8 energy security special fund established under section 201-12.8.

9 ~~[(d)]~~ (e) Nothing in this section shall preclude any
10 county from establishing procedures and standards required to
11 implement this section.

12 ~~[(e)]~~ (f) Nothing in this section shall preclude
13 participation in any utility demand-side management program or
14 public benefits fee program under part VII of chapter 269."

15 SECTION 3. This Act does not affect rights and duties that
16 matured, penalties that were incurred, and proceedings that were
17 begun before its effective date.

18 SECTION 4. Statutory material to be repealed is bracketed
19 and stricken. New statutory material is underscored.

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1 SECTION 5. This Act shall take effect on July 1, 2018.

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INTRODUCED BY:




Michelle Tidoni
Suzanne R. Proenza



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Report Title:

Energy Efficiency; Solar Water Heater; Variance

Description:

Requires applicants to provide further documentation for using a demand water heater device in lieu of a solar water heater or renewable energy technology system. Allows coordinator to exercise discretion in denying variance applications.

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