
A BILL FOR AN ACT

RELATING TO SOLAR WATER HEATERS.

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, was intended to benefit consumers by
3 requiring new homes to use solar water heating except in
4 narrowly limited circumstances. Act 204, also known as the
5 "solar water heater mandate," created a variance process for
6 noncompliant solar water heaters.

7 The legislature further finds that, the following year, in
8 an attempt to clarify the intent of Act 204, the legislature
9 passed Act 155, Session Laws of Hawaii 2009. Act 155 explained
10 that in passing Act 204 in 2008, the legislature had "found that
11 retrofitting a home for a solar water heater after [the home]
12 was constructed was more costly, and that such upfront
13 costs . . . were substantial barriers for the average consumer."
14 However, the legislature further explained that "[t]he financial
15 barriers can be addressed . . . by including the installation of
16 a solar water heater into the purchase price and mortgage of a



1 home, where the cost of the system may pay for itself
2 immediately."

3 Act 155 further clarified the use of variances allowed by
4 Act 104. Act 104 provided a variance process by which a single
5 family dwelling could be built without a solar water heater if:

- 6 (1) Installation is impractical due to poor solar
7 resource;
- 8 (2) Installation is cost-prohibitive based upon a life
9 cycle cost-benefit analysis;
- 10 (3) A renewable energy technology system, such as a solar
11 photovoltaic system, is substituted for use as the
12 primary energy source for heating water; or
- 13 (4) A demand water heater device approved by Underwriters
14 Laboratories, Inc., is installed; provided that at
15 least one other gas appliance is installed in the
16 dwelling.

17 As explained in Act 155, the legislature intended that
18 variances to the solar water heater mandate be "rarely, if ever,
19 exercised or granted." Moreover, the legislature expressly
20 intended that variances based on the "demand water heater
21 device" provision be even rarer, stating "if the potential



1 variance applicant is not the party who will ultimately pay for
2 the energy cost consumption, then only [variance exceptions
3 (1)-(3) under the solar water mandate] should apply." However,
4 it appears that the variance process frequently circumvents the
5 legislature's objectives. Through December 2017, 5,429 variance
6 requests have been filed, more than 5,416 of those requests have
7 been granted, and over 5,100 of those requests have been for
8 demand water heaters. In addition, over two thousand of the
9 variance requests were submitted by a single architect, an
10 individual who incurred none of the energy consumption costs.

11 The legislature believes that it is necessary to amend the
12 solar water heater mandate to effectuate the intent of Act 204
13 and Act 155. This need is particularly significant given the
14 substantial number of residential tracts presently under
15 development throughout the State.

16 Accordingly, the purpose of this Act is to:

- 17 (1) Protect consumers from being forced to pay
18 unnecessarily high costs for water heating;
- 19 (2) Close the loophole that allows applicants to
20 circumvent the legislature's stated objectives for
21 solar water heating systems; and



1 (3) Ensure that a variance for a demand water heater is
2 granted only if solar water heating is cost-
3 prohibitive and if no renewable energy technology
4 system can be substituted as the primary energy source
5 for heating water.

6 SECTION 2. Section 196-6.5, Hawaii Revised Statutes, is
7 amended by amending subsections (a) and (b) to read as follows:

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

15 ~~[(1) Installation is impracticable due to poor solar~~
16 ~~resource,~~

17 ~~-(2)]~~ (1) Installation is cost-prohibitive based upon a
18 life 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; or



1 ~~[(3)]~~ (2) A renewable energy technology system, as defined
2 in section 235-12.5, is substituted for use as the
3 primary energy source for heating water ~~[, or~~
4 ~~(4) A demand water heater device approved by Underwriters~~
5 ~~Laboratories, Inc., is installed; provided that at~~
6 ~~least one other gas appliance is installed in the~~
7 ~~dwelling. For the purposes of this paragraph, "demand~~
8 ~~water heater" means a gas tankless instantaneous water~~
9 ~~heater that provides hot water only as it is needed].~~

10 (b) A request for a variance shall be submitted to the
11 coordinator on an application prescribed by the coordinator and
12 shall include a description of the location of the property and
13 justification for the approval of a variance using the criteria
14 established in subsection (a). The coordinator may deny any
15 variance application that the coordinator deems incomplete or
16 insufficient to satisfy the criteria in subsection (a). A
17 variance shall be deemed approved if not denied within thirty
18 working days after receipt of the variance application. The
19 coordinator shall publicize:

20 (1) All applications for a variance within seven days
21 after receipt of the variance application; and



1 (2) The disposition of all applications for a variance
2 within seven days of the determination of the variance
3 application."

4 SECTION 3. This Act does not affect rights and duties that
5 matured, penalties that were incurred, and proceedings that were
6 begun before its effective date.

7 SECTION 4. Statutory material to be repealed is bracketed
8 and stricken. New statutory material is underscored.

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



Report Title:

Solar Water Heaters; Energy Conservation; DBEDT

Description:

Requires that solar water heater variance applications be signed by the architect or mechanical engineer attesting to the need for the variance. Narrows available criteria for granting a variance. (HB2109 HD1)

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