
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 close the
17 loophole that allows applicants to circumvent the legislature's
18 stated objectives for solar water heating systems and ensure
19 that a variance for a demand water heater is granted only if
20 solar water heating is impracticable and cost-prohibitive and if



1 no renewable energy technology system can be substituted as the
2 primary energy source for heating water.

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

5 "**§196-6.5 Solar water heater system required for new**
6 **single-family residential construction.** (a) On or after
7 January 1, 2010, no building permit shall be issued for a new
8 single-family dwelling that does not include a solar water
9 heater system that meets the standards established pursuant to
10 section 269-44, unless the coordinator approves a variance. A
11 variance application shall only be accepted if [~~submitted~~
12 signed by an architect or mechanical engineer licensed under
13 chapter 464, who attests that:

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



1 (3) A renewable energy technology system, as defined in
2 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 renewable gas-tankless
9 instantaneous water heater that provides hot water
10 only as it is needed[-] and has a uniform energy
11 factor of 0.93 or higher.

12 (b) All applications for a variance under subsection

13 (a) (4) shall:

14 (1) Be signed by the applicant who shall be the owner and
15 occupant of the dwelling and shall include an
16 attestation by the applicant that the applicant shall
17 pay the energy costs for heating water in the home;
18 and

19 (2) Include an attestation by an architect or mechanical
20 engineer licensed under chapter 464 that a variance
21 under subsection (a) (3) would be impracticable and



1 cost-prohibitive in accordance with subsections (a)(1)
2 and (a)(2).

3 ~~(b)~~ (c) A request for a variance shall be submitted to
4 the coordinator on an application prescribed by the coordinator
5 and shall include a description of the location of the property
6 and justification for the approval of a variance using the
7 criteria established in subsection (a). The coordinator may
8 deny any variance application that the coordinator deems
9 incomplete or insufficient to satisfy the criteria in
10 subsections (a) and (b). A variance shall be deemed approved if
11 not denied within thirty working days after receipt of the
12 variance application. The coordinator shall publicize:

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

15 (2) The disposition of all applications for a variance
16 within seven days of the determination of the variance
17 application.

18 ~~(e)~~ (d) The director of business, economic development,
19 and tourism may adopt rules pursuant to chapter 91 to impose and
20 collect fees to cover the costs of administering variances under



1 this section. The fees, if any, shall be deposited into the
2 energy security special fund established under section 201-12.8.

3 ~~(d)~~ (e) Nothing in this section shall preclude any
4 county from establishing procedures and standards required to
5 implement this section.

6 ~~(e)~~ (f) Nothing in this section shall preclude
7 participation in any utility demand-side management program or
8 public benefits fee program under part VII of chapter 269.

9 (g) As used in this section, "uniform energy factor" shall
10 have the same meaning as in title 10 Code of Federal Regulations
11 part 430, subpart B, appendix E, as amended."

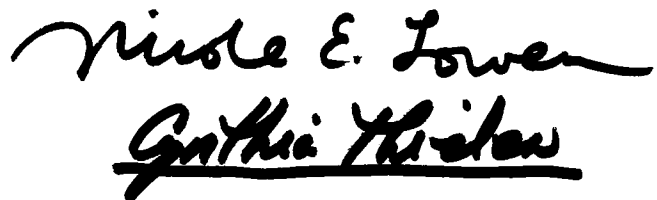
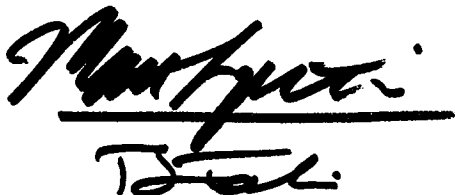
12 SECTION 3. Statutory material to be repealed is bracketed
13 and stricken. New statutory material is underscored.

14 SECTION 4. This Act does not affect rights and duties that
15 matured, penalties that were incurred, and proceedings that were
16 begun before its effective date.

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

18

INTRODUCED BY:



JAN 19 2018



H.B. NO. 2109

Report Title:

Solar Water Heaters; Energy Conservation; DBEDT

Description:

Requires that solar water heater variances be signed by the architect or mechanical engineer attesting to the need for the variance. Requires that any tankless water heater installed instead of a solar water heater be energy efficient. Requires that the individual who would pay for the energy costs sign the application for a solar water heater variance.

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

