



Government
of Canada

Gouvernement
du Canada

Step 3 : Submit your comment(s) - Canada Gazette, Part I, Volume 158, Number 25: Regulations Amending the Energy Efficiency Regulations, 2016 (Amendment 18)

Note: Closing browser window

Please do not close this window during the comment submission process. Closing the window or navigating away from this page might result in losing your comment(s) including your attachment(s) and you will have to restart the process from the beginning.

Your comment(s)

Executive summary

Joint comments are submitted on behalf of the Air Conditioning, Heating and Refrigeration Institute (AHRI), the Canadian Institute for Plumbing and Heating (CIPH), and the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI), collectively referred to here as the "Joint Commenters." Our associations represent the majority of manufacturers of heating, refrigeration, air conditioning, and water heating products and systems sold into the Canadian and U.S. markets.

AHRI is the trade association representing over 330 manufacturers of commercial refrigeration equipment, water heaters, heating, ventilating, and air-conditioning equipment. It is an internationally recognized advocate for the heating, ventilation, air conditioning and refrigeration (HVACR) and water heating industry and certifies the performance of many of the products manufactured by its members. In North America, the annual economic activity resulting from the HVACR industry is more than \$211

billion.

Founded in Montréal in 1933, the CIPH is a pan-Canadian not-for-profit trade association. The Mission of CIPH is to promote the responsible growth and prosperity of members: manufacturers, wholesaler distributors, manufacturers' agents and associates in the plumbing, heating, hydronics, industrial PVF, waterworks and water systems industry in Canada.

Founded in 1968, HRAI is Canada's national non-profit trade association for the HVACR industry, representing over 1,150 member companies across the country. Our members include manufacturers, wholesalers and contractors who collectively employ tens of thousands of skilled trade professionals across the country and contribute more than \$12B annually to the Canadian economy

The Joint Commenters appreciate NRCan's considerable efforts to harmonize regulatory requirements with the United States, Canada's principal North American trading partner. As identified by NRCan in Canada Gazette, Part I, unnecessary regulatory differences across jurisdictions can "hinder cross-border trade and investment and ultimately impose a cost on citizens, businesses, and economies." To that end, the Joint Commenters have product-specific recommendations to reduce regulatory friction for water heaters and single package central air conditioners and heat pumps (comments submitted under "Proposed Regulatory Text") and one key general recommendation that impacts several products.

NRCan has proposed compliance deadlines for new energy efficiency standards that would be retroactively effective. For example, proposals for large, air-cooled air conditioner/heat pump would be effective for products manufactured on or after January 1, 2023. In Amendment 18 Canada Gazette, Part I, NRCan proposed January 1, 2023, compliance to "harmonize the period of manufacture with the U.S. compliance date and the proposed energy efficiency standards would come into force six months after the Amendment would be published in the Canada Gazette, Part II." During the dedicated outdoor air system (DOAS) Amendment 19 technical bulletin webinar held in

June 2024, NRCan staff explained the compliance dates in the past will go into force 70-days after publication in Canada Gazette, Part II. These two statements appear to conflict. The Joint Commenters are concerned that a 70-day compliance period is too short for manufacturers and certification bodies to react to, particularly, if NRCan proposals are not fully harmonized, as may be the case with household water heaters.

While the Joint Commenters support Canada fully harmonizing with U.S. efficiency standards, test procedures, and compliance dates – harmonization of compliance dates should only be applied to future dates, not to past compliance dates. Products are regulated on the date of manufacture, so a product manufactured prior to January 1, 2023, and legally sold into Canada, would become illegal (if transported across provincial or national borders) and stranded if NRCan were to adopt a retroactive compliance date. For products where the US compliance deadline will have (or already has) passed, the Joint Commenters recommend NRCan proposed energy efficiency standards come into force at least six months after the Amendment is published in the Canada Gazette, Part II.

The Joint Commenters support NRCan adopting fully harmonized test procedures and energy efficiency minimums with the U.S. Department of Energy (DOE), well in advance of compliance deadlines. Predictability and regulatory certainty benefits manufacturers, regulators, citizens, and businesses.

PROPOSED REGULATORY TEXT

Consumers Water Heaters

The Joint Commenters support NRCan's intent to harmonize definitions test procedures and standards for consumer water heaters with those of the United States. However, the Joint Commenters provide the following comments to further improve the household water heater proposal. As outlined in the following paragraphs, the Joint Commenters suggest NRCan use this opportunity to align Canada's standards with future standards outlined in the consumer water heater energy conservation standard

final rule where practicable.

Test Procedure for Consumer Water Heaters:

The June 2023 test procedure final rule adopted a new optional “high temperature test” for certain electric resistance storage water heaters (“ERSWHs”) as well as an associated “effective storage volume metric” to provide consumers with additional information. In their energy conservation standards final rule, 2024 amended the test procedure to make the optional high temperature test mandatory for certain electric storage water heaters upon the compliance date for the new ECS for consumer water heaters (May 6, 2024). Electric storage water heaters subject to the high temperature test must test their units at their highest temperature offering to determine Uniform Energy Factor (“UEF”) and First Hour Rating (“FHR”) and effective storage volume. DOE bases its product class structure on a new “effective storage volume” metric in lieu of “rated storage volume.” The Department adopted these modifications to the test procedure to restrict the ability of smaller (and generally lower first cost) ERSWH to be “superheated” and be paired with a mixing valve as a replacement installation that have historically been served by higher storage volume WHs, thereby undermining the expected energy savings associated with heat pump standards for the larger storage volume classes.

Water heaters must certify according to the requirements in section 5.1.1 until the publication of a final rule reviewing potential amended energy conservation standards and specifying the required use of section 5.1.2 for these products published after June 21, 2023” (88 FR 40406, 40474). The Joint Commenters understand this would mean that electric resistance storage would be subject to mandatory representation of V_{eff} using the high temperature test after new 2029 standards have gone into effect. This is only appropriate for setting heat pumps standards, which we do not recommend.

The Joint Commenters recommend NRCan adopt 10 C.F.R. Appendix E but omit the requirement to test to section 5.1.2. Omitting Section 5.1.2 would allow ERSWH to test at conditions harmonized with standards proposed by the Joint Commenters, (shown below in [bracketed] text).

10 C.F.R. Appendix E

means Appendix E to Subpart B, Part 430 of Title 10 to the United States Code of Federal Regulations, entitled Uniform Test Method for Measuring the Energy Consumption of Water Heaters, [omitting Section 5.1.2], as amended from time to time. (appendix E 10 C.F.R.)

Veff

means the effective storage volume, expressed in litres, of a water heater's storage tank, as determined in accordance with 10 C.F.R. Appendix E. (Veff)

As mentioned above, the DOE's high temperature test and effective storage volume paradigm is intended to provide a firewall that ensures the heat pump energy conservation standards are not supplanted by smaller electric resistance water heaters that are set to their maximum temperature setting and paired with a mixing valve to extend their "effective" storage volume and First Hour Rating. Given that NRCan is not proposing to eliminate electric storage water heaters from the market in the same way the Department of Energy has adopted, the Joint Commenters recommend NRCan omit the requirement that certain water heaters use "the high temperature test" in Appendix E. Section 5.1.2 of 10 C.F.R. Appendix E requires that electric resistance storage water heaters with a permanent mode (i.e., greater than 120- hours without user intervention) or setting that can heat and store water above 135°F must be tested with the unit set to the maximum mean tank temperature and be paired with a mixing valve to deliver an outlet temperature of 125 ± 5 F. The high temperature test must then be used to determine the UEF, FHR, and effective storage volume for a given model to demonstrate compliance with the energy conservation standards. Testing to the high temperature test increases the effective storage volume and lowers the UEF of a given unit. For the American market, manufactures will be able to limit the tank temperature setpoint below the 135 °F threshold such that electric resistance water heaters are not subject to the high temperature testing. However, this approach is not possible for the Canadian market as the National Plumbing Code of Canada requires that electric resistance water heaters be shipped at a 140 °F setpoint. Note that the National

Plumbing Code of Canada: 2020 at section 2.6.1.12 and also Canadian Safety Standard C22.2 No 110 states that

Water tanks intended for household use that do not incorporate an integral mixing valve to control water delivery temperature shall have their temperature-regulating thermostats or controls factory set at 60°C (140°F).

Therefore maintaining the test procedure reference without removing the requirement outlined in 10 CFR Appendix-E-to-Subpart-B-of-Part-430 5.1.2 will have the unintended impact of dramatically increasing the stringency of the standards such that most if not all products on the market will not be able to comply. (electric storage water heaters).

Electric Storage Water Heaters Standards:

While the Joint Commenters supports the adoption of the Uniform Energy Factor (UEF) metric and test procedure, NRCan's proposal is not harmonized with DOE.

On May 6th, 2024, the Department of Energy (DOE) published a final rule amending energy conservation standards for electric storage water heaters. In that final rule, DOE adopted energy conservation standards for electric storage water heaters with effective storage volumes less than 20 gallons. Until May 6, 2029, there are no DOE energy conservation standards for electric storage water heaters below 20 gallons. On and after May 6, 2029, the DOE standards are less stringent than those proposed by NRCan. The Joint Commenters recommend alignment with DOE standards and compliance dates for water heaters less than 20 gallons. Several recommendations to support this goal are also recommended in the table below. For example, for the "Household electric water heaters that have a bottom inlet and a V_r of ≥ 50 L (13.2 US gallons) but ≤ 270 L (71.3 US gallons)" category, the Joint Commenters recommend efficiency standards in terms of standby loss be sunset for 13.2 to 20 gallons water heaters manufactured on or after May 5, 2029. (In the table below, the period of manufacture is noted to be before May 6, 2029.)

The proposed energy efficiency standards for electric storage water heaters with a volume greater than 55 gallons and less than or equal to 120 gallons are significantly

more stringent than the current NRCAN standby loss standards and do not align with the DOE standards, which require a level only achievable with heat pump technology. The Joint Commenters understand the intent is to set a level achievable with electric resistance technology and NRCAN has proposed to extend the standard corresponding below 55-gallon high draw pattern. The Joint Commenters note that UEF decreases with decreasing draw pattern and there will be many models above 55 gallons that are tested in the medium draw pattern (i.e., have a FHR <75 gallons). Therefore, the Joint Commenters recommend setting standards for each draw pattern as consistent as possible with DOE. The Joint Commenters recommend that NRCAN conduct testing, in conjunction with industry, to validate standards for these products. Refer to Amendments Text Comment for proposal.

Gas Storage Water Heaters:

While the Joint Commenters support the adoption of the UEF metric and test procedure, NRCAN's proposal for gas-storage water heaters are not fully harmonized with U.S. Department of Energy (DOE).

Household gas-fired storage water heaters that have a V_{eff} of < 75.7 L (20 US gallons):

On May 6, 2024, the DOE published a final rule adopting new energy conservation standards for gas storage water heaters with effective storage volumes less than 20 gallons with compliance with the new standards being required on May 6, 2029. The Joint Commenters recommend alignment with DOE standards and compliance dates.

Household gas-fired storage water heaters that have a V_{eff} of ≥ 76 L (20 gal) and ≤ 380 L (100 gal)

The energy efficiency standards for gas storage water heaters with a volume greater than 20 gallons and less than or equal to 100 gallons are not fully aligned with the DOE standards. Current DOE standards have differing energy conservation standards for gas

storage water heaters in the ≥ 20 gal and ≤ 55 gal (currently aligned with NRCan Standards) than for the > 55 gal and ≤ 100 gal (currently not aligned with NRCan Standards) which currently require a level only achievable with condensing technologies.

The stringency for current standards for gas storage water heaters that have a V_{eff} of ≥ 76 L (20 gal) and ≤ 208.2 L (55 US gallons) are currently aligned. However, in the recently published May 2024 consumer water heater energy conservation standards, DOE has adopted higher efficiency standards for this product class that will require the use of a damper. The compliance date for this standard is May 6, 2029. The Joint Commenters recommend NRCan maintains the current product class structure and standards, including the dual EF/UEF pathway for the gas storage V_{eff} of ≥ 76 L (20 gal) and ≤ 380 L (100 gal) product class up until the May 6, 2029, compliance date. The Joint Commenters recommend for, beginning on May 6, 2029, NRCan to align with the DOE standards and bifurcate the $V_{eff} \geq 76$ L (20 gal) and ≤ 380 L (100 gal) product class and set separate standards for $V_{eff} \geq 76$ L (20 gal) and ≤ 208.2 L (55 US gallons) and $V_{eff} > 208.2$ L (55 gal) and ≤ 380 L (100 US gallons) to align with those of the United States.

Refer to Amendments Text Comment for proposal.

Split system central air conditioner/heat pump (3-ph)

The Joint Commenters support NRCan's proposal to reference DOE Appendix F1 to Subpart F of Part 431, Title 10 as the test procedure for three-phase split system central air conditioner/heat pump (CAC/HP) less than 65,000 Btu/h (19kW). DOE Appendix F1 adopts AHRI Standard 210/240-2023 by reference.

NRCan should also be aware that DOE has proposed modifications to Appendix M1

that will impact single-phase split system CAC/HP. In Amendment 17, NRCan amended 3 Section 107 of the Regulation to add "10 C.F.R. Appendix M1 means Appendix M1 to Subpart B, Part 430 of Title 10 to the United States Code of Federal Regulations, entitled Uniform Test Method for Measuring the Energy Consumption of Central Air Conditioners and Heat Pumps, as amended from time to time [Emphasis added]. (appendice M1 10 C.F.R.)." In April 2024, DOE proposed to amend Appendix M1, Section 4.1 to define Outdoor Units With No Match (OUWNM) as An Outdoor Unit that is not distributed in commerce with any indoor units, that meets any of the following criteria:

- (a) Is designed for use with a refrigerant that makes the unit banned for installation when paired with an Indoor Unit as a system, according to EPA regulations in 40 CFR chapter I, subchapter C,
- (b) Is designed for use with a refrigerant that has a 95 °F midpoint saturation absolute pressure that is ± 18 percent of the 95 °F saturation absolute pressure for R-22, or
- (c) Is shipped without a specified refrigerant from the point of manufacture or is shipped such that more than two pounds of refrigerant are required to meet the charge per section 5.1.8 of AHRI 210/240-202X. This shall not apply if either:
 - (1) The factory charge is equal to or greater than 70% of the outdoor unit internal volume times the liquid density of refrigerant at 95 °F, or
 - (2) An A2L refrigerant is approved for use and listed in the certification report

The DOE has proposed that for Appendix M1 an expanded definition for "outdoor unit with no match (OUWNM)" include split-systems using hydrofluorocarbon (HFC) refrigerants having a global warming potential (GWP) greater than 700, which are banned by the U.S. Environmental Protection Agency (EPA) beginning on January 1, 2025. Because of the direct reference by NRCan of Appendix M1, as amended, and the proposed DOE amendment referencing refrigerants banned by EPA, the Joint Commenters believe the US refrigerant ban will mean no new matched R-410A systems (after January 1, 2025) will be available in the Canadian market. The Joint Commenters request NRCan work with DOE and publish guidance on this topic prior to January 1, 2025, should the impact be as described above.

As NRCan has proposed to adopt Appendix F1 for 3-ph CAC/HP less than 65, 000 Btu/h, also "as amended from time to time," these products may also be impacted if DOE similarly proposes definitional changes to OUWNM.

Amendments

Water Heaters

The Joint Commenters recommend NRCan adjust the electric water heater standards table as recommended below:

1. For Household electric water heaters that have a bottom inlet and a V_r of ≥ 50 L (13.2 US gallons) but ≤ 270 L (71.3 US gallons), the Joint Commenters recommend adding to the "Period of Manufacture" column, "On or after February 3, 1995, and before May 6, 2029, for ≥ 50 L (13.2 US gallons) but ≤ 20 US gallons" and also, "For >20 and ≤ 55 US gallons, Joint Commenters recommend the final manufacture compliance date be harmonized with date for in item 5 (For example, if NRCan selects the compliance date of May 6, 2029 for line 5, then this date should be "before May 6, 2029")"
2. For Household electric water heaters that have a bottom inlet and a V_r of > 270 L (71.3 US gallons) but ≤ 454 L (120 US gallons) the Joint Commenters recommend adding to the "Period of Manufacture" column, "On or after February 3, 1995, and before a date that is no sooner than two years after publication of Gazette II and no later than May 6, 2029"
3. For Household electric water heaters that have a top inlet and a V_r of ≥ 50 L (13.2 US gallons) but ≤ 270 L (71.3 US gallons), the Joint Commenters recommend adding to the "Period of Manufacture" column, "On or after February 3, 1995, and before May 6, 2029 for ≥ 50 L (13.2 US gallons) but ≤ 20 US gallons" and also, "For >20 and ≤ 55 US gallons, Joint Commenters recommend the final manufacture compliance date be harmonized with date for in item 5 (For example, if NRCan selects the compliance date of May 6, 2029 for line 5, then this date should be "before May 6, 2029")."

4. For Household electric water heaters that have a top inlet and a V_r of > 270 L (71.3 US gallons) but ≤ 454 L (120 US gallons) the Joint Commenters recommend adding to the "Period of Manufacture" column, "On or after February 3, 1995, and before a date that is no sooner than two years after publication of Gazette II and no later than May 6, 2029."
5. The Joint Commenters recommend adding new Item 5:
 - a. Energy-using product: Household electric water heaters that have a V_{eff} of ≥ 50 L (13.2 US gallons) but < 75.7 L (20 US gallons)
 - b. Testing Standard: 10 C.F.R. Appendix E
 - c. Energy Efficiency Standard: Must have at least one of the following:
 - i. (a) uniform energy factor of $\geq 0.5925 - 0.001559 V_{eff}$, if draw pattern is very-small-usage;
 - ii. (b) uniform energy factor of $\geq 0.8642 - 0.000793 V_{eff}$, if draw pattern is low-usage;
 - iii. (c) uniform energy factor $\geq 0.9096 - 0.000528 V_{eff}$, if draw pattern is medium-usage;
 - iv. (d) uniform energy factor $\geq 0.9430 - 0.000317 V_{eff}$, if a draw pattern is high-usage.
 - d. Period of Manufacture: On or after a date that is no sooner than two years after publication of Gazette II and no later than May 6, 2029
6. The Joint Commenters recommend adding new Item 6:
 - a. Energy-using product: Household electric water heaters that have a V_{eff} of ≥ 75.7 L (20 US gallons) but ≤ 208.2 L (55 US gallons)
 - b. Testing Standard: 10 C.F.R. Appendix E
 - c. Energy Efficiency Standard: Must have at least one of the following:
 - i. (a) uniform energy factor of $\geq 0.8808 - 0.000211 V_{eff}$, if draw pattern is very-small-usage;
 - ii. (b) uniform energy factor of $\geq 0.9254 - 0.000079 V_{eff}$, if draw pattern is low-usage;
 - iii. (c) uniform energy factor $\geq 0.9307 - 0.000053 V_{eff}$, if draw pattern is medium-usage;
 - iv. (d) uniform energy factor $\geq 0.9349 - 0.000026 V_{eff}$, if a draw pattern is high-usage.
 - d. Period of Manufacture: On or after a date that is no sooner than two years after publication of Gazette II and no later than May 6, 2029
7. The Joint Commenters recommend adding new Item 7:

- a. Energy-using product: Household electric water heaters that have a V_{eff} of > 208.2 L (55 US gallons) but ≤ 454.2 L (120 US gallons)
 - b. Testing Standard: 10 C.F.R. Appendix E
 - c. Energy Efficiency Standard:
 - d. Period of Manufacture: On or after May 6, 2029
8. The Joint Commenters recommend adding new Item 8:
- a. Energy-using product: Household electric water heaters that have a V_{eff} of > 454.2 L (120 US gallons)
 - b. Testing Standard: 10 C.F.R. Appendix E
 - c. Energy Efficiency Standard: Must have at least one of the following:
 - i. (a) uniform energy factor of $\geq 0.3574 - 0.0003170 V_{eff}$, if draw pattern is very-small-usage;
 - ii. (b) uniform energy factor of $\geq 0.7897 - 0.0005019 V_{eff}$, if draw pattern is low-usage;
 - iii. (c) uniform energy factor $\geq 0.8884 - 0.0004491 V_{eff}$, if draw pattern is medium-usage;
 - iv. (d) uniform energy factor $\geq 0.9575 - 0.0003434 V_{eff}$, if a draw pattern is high-usage.
 - d. Period of Manufacture: On or after May 6, 2029
9. Current energy-using product identified as item 5 should be moved to item 9.

The Joint Commenters recommend the gas water heater standards tables as be modified as described, below:

- 1. For Household gas-fired storage water heaters that have a first-hour rating of < 68 L (18 US gallons), the Joint Commenters recommend that the
 - a. Testing Standard: 10 C.F.R. Appendix E for uniform energy factor; CSA P.3-04 for energy factor
 - b. Energy Efficiency Standard: Must have at least one of the following: (a) uniform energy factor of $\geq 0.3456 - 0.0005 V_s$; or (b) energy factor of $\geq 0.675 - 0.00039 V_r$,
 - c. Period of Manufacture: On or after January 1, 2018, and before a date that is no sooner than two years after publication of Gazette II and no later than May 6, 2029

2. For Gas-fired storage water heaters that have a first-hour rating of ≥ 68 L (18 US gallons) but < 193 L (51 US gallons), the Joint Commenters recommend:
 - a. Testing Standard: 10 C.F.R. Appendix E for uniform energy factor; CSA P.3-04 for energy factor
 - b. Energy Efficiency Standard: Must have at least one of the following: (a) uniform energy factor of $\geq 0.5982 - 0.00047 V_s$; or (b) energy factor of $\geq 0.675 - 0.00039 V_r$.
 - c. Period of Manufacture: On or after January 1, 2018, and before a date that is no sooner than two years after publication of Gazette II and no later than May 6, 2029
3. For Gas-fired storage water heaters that have a first-hour rating of ≥ 193 L (51 US gallons) but < 284 L (75 US gallons), the Joint Commenters recommend:
 - a. Testing Standard: 10 C.F.R. Appendix E for uniform energy factor; CSA P.3-04 for energy factor
 - b. Energy Efficiency Standard: Must have at least one of the following: (a) uniform energy factor of $\geq 0.6483 - 0.00042 V_s$; or (b) energy factor of $\geq 0.675 - 0.00039 V_r$.
 - c. Period of Manufacture: On or after January 1, 2018, and before a date that is no sooner than two years after publication of Gazette II and no later than May 6, 2029
4. For Gas-fired storage water heaters that have a first-hour rating of > 284 L (75 US gallons), the Joint Commenters recommend:
 - a. Testing Standard: 10 C.F.R. Appendix E for uniform energy factor; CSA P.3-04 for energy factor
 - b. Energy Efficiency Standard: Must have at least one of the following: (a) uniform energy factor of $\geq 0.692 - 0.00032 V_s$; or (b) energy factor of $\geq 0.675 - 0.00039 V_r$.
 - c. Period of Manufacture: On or after January 1, 2018, and before a date that is no sooner than two years after publication of Gazette II and no later than May 6, 2029
5. For Household gas-fired storage water heaters that have a V_{eff} of < 75.7 L (20 US gallons), the Joint Commenters Recommend:
 - a. Testing Standard: 10 C.F.R. Appendix E
 - b. Energy Efficiency Standard: Must have at least one of the following: (a) uniform energy factor of $\geq 0.2062 - 0.000528 V_{eff}$, if draw pattern is very-small-usage; (b) uniform energy factor of $\geq 0.4893 - 0.000713 V_{eff}$, if draw pattern is low-usage; (c) uniform energy factor of $\geq 0.5758 - 0.000608 V_{eff}$, if draw pattern is medium-usage; (d) uniform energy factor of $\geq 0.6586 - 0.000528 V_{eff}$, if draw pattern is high-usage.

- c. Period of Manufacture: On or after May 6, 2029
- 6. For Household gas-fired storage water heaters that have a V_{eff} of ≥ 76 L (20 gal) and ≤ 208.2 L (55 US gallons), the Joint Commenters Recommend:
 - a. Testing Standard: 10 C.F.R. Appendix E
 - b. Energy Efficiency Standard: Must have at least one of the following: (a) uniform energy factor of $\geq 0.3925 - 0.0005283 V_{eff}$, if draw pattern is very-small-usage; (b) uniform energy factor of $\geq 0.6451 - 0.0005019 V_{eff}$, if draw pattern is low-usage; (c) uniform energy factor of $\geq 0.7046 - 0.0004491 V_{eff}$, if draw pattern is medium-usage; (d) uniform energy factor of $\geq 0.7424 - 0.0003434 V_{eff}$, if draw pattern is high-usage.
 - c. Period of Manufacture: On or after May 6, 2029
- 7. For Household gas-fired storage water heaters that have a $V_{eff} > 208.2$ L (55 gal) and ≤ 380 L (100 US gallons), the Joint Commenters Recommend:
 - a. Testing Standard: 10 C.F.R. Appendix E
 - b. Energy Efficiency Standard: Must have at least one of the following: (a) uniform energy factor of $\geq 0.6470 - 0.0001585 V_{eff}$, if draw pattern is very-small-usage; (b) uniform energy factor of $\geq 0.7689 - 0.00013209 V_{eff}$, if draw pattern is low-usage; (c) uniform energy factor of $\geq 0.7897 - 0.00010567 V_{eff}$, if draw pattern is medium-usage; (d) uniform energy factor of $\geq 0.8072 - 0.00007925 V_{eff}$, if draw pattern is high-usage.
 - c. Period of Manufacture: On or after a date that is no sooner than two years after publication of Gazette II and no later than May 6, 2029
- 8. For Household gas-fired storage water heaters that have a $V_{eff} > 380$ L (100 US gallons), the Joint Commenters Recommend:
 - a. Testing Standard: 10 C.F.R. Appendix E
 - b. Energy Efficiency Standard: Must have at least one of the following: (a) uniform energy factor of $\geq 0.1482 - 0.0001849 V_{eff}$, if draw pattern is very-small-usage; (b) uniform energy factor of $\geq 0.4342 - 0.0004491 V_{eff}$, if draw pattern is low-usage; (c) uniform energy factor of $\geq 0.5596 - 0.0005283 V_{eff}$, if draw pattern is medium-usage; (d) uniform energy factor of $\geq 0.6658 - 0.000501 V_{eff}$, if draw pattern is high-usage.
 - c. Period of Manufacture: On or after May 6, 2029

Coming into Force

Compliance Dates:

As noted previously, the Joint Commenters advocate for harmonized test procedures and efficiency standards well in advance of compliance deadlines to ensure predictability and regulatory certainty for all stakeholders. While the Joint Commenters support Canada fully harmonizing its efficiency standards, test procedures, and compliance dates with those of the U.S., harmonization should apply only to future compliance dates, and should not apply retroactively. Applying past compliance dates would risk stranding products legally sold prior to the new regulations. For standards where the U.S. compliance deadline has passed, the Joint Commenters recommend that NRCan implement the new requirements at a set timeframe after publication in the Canada Gazette.

In line with these best practices, the Joint Commenters suggest NRCan align standards with those outlined in the consumer water heater energy conservation standard final rule, where practicable.

The Joint Commenters appreciate NRCan's consideration of a "hybrid" compliance pathway to give regulated parties time to transition to the proposed testing standards and energy efficiency standards. However, given the likelihood that NRCan will publish a final rule after the proposed compliance date of January 1, 2025, the Joint Commenters recommend that NRCan utilize the approach used by the Department of Energy and outlined in the 2014 guidance policy (available here: https://www1.eere.energy.gov/buildings/appliance_standards/pdfs/tp_earlyuse_faq_2014-8-25.pdf) when there is a metric transition. The Joint Commenters note that NRCan could achieve the same outcome of the proposed "hybrid" compliance pathway while providing manufactures with greater certainty regarding certification and standard timelines by adjusting the compliance date accordingly. Additionally, NRCan could allow for early certification to the new energy conservation standards using the amended test procedure during the interim period between when the standard is adopted by NRCan and compliance is required. The Joint Commenters encourage NRCan to only sunset EF standards after UEF standards go into force.

Your contact info

First name: Laura

Last name: Petrillo-Groh

Email: lpetrillo-groh@ahrinet.org

Phone number:

Country: UNITED STATES

Organization type: Association

Organization name: AHRI/CIPH/HRAI

NAICS: 31 - Manufacturing

Add Supporting Resources or References with your comments

Note: Please use this section if you wish to submit documents for supporting resources or references for your comments. Upon clicking the attach file button, it will be replaced by a remove reference/resource button, if you wish to remove the file. The content provided in the documents will only be used by departments and will not be published on the Canada Gazette website. Do not enter comments for the proposed regulation in the supporting resources or references (please use the commenting boxes).

Please review the following file restrictions before uploading, file size and file type restrictions.

Submit resources/references
A maximum of 3 files can be attached to a comment on proposed regulations submission.

Title or description of the reference/resource	Reference/resource document	Action
--	-----------------------------	--------

	No file chosen	Attach file
-------------	---------------------------	------------------------

Showing 0 of 3 reference(s)/resource(s)

Return to step 2 of 3	Step 3: Submit your comment(s)
----------------------------------	---