June 8, 2022

Wendy Simons, Rulemaking Coordinator  
Blake Shelide, Facilities Engineer  
Oregon Department of Energy  
550 Capitol St. NE, 1st Floor  
Salem, OR 97301


Dear Ms. Simons:

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) respectfully offers the following comments for consideration on the Oregon Department of Energy’s (ODOE) draft rules implementing House Bill 2062 (HB 2062) and its associated energy efficiency standards for electric storage water heaters.

AHRI represents more than 300 manufacturers of air conditioning, heating, commercial refrigeration, and water heating equipment. It is an internationally recognized advocate for the heating, ventilation, air conditioning, and refrigeration (HVACR) and water heating industries 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 approximately $256 billion. In the United States alone, AHRI’s members, along with distributors, contractors, and technicians, employ more than 1.3 million people.

AHRI appreciates and supports the ODOE delay of the CTA-2045 requirements for both electric resistance water heaters and heat pump water heaters (HPWHs) in Oregon. As the COVID-19 pandemic and supply chain issues continue, AHRI is still very concerned about when the availability of critical components will return to normal. While AHRI supports the ODOE’s delay to the maximum extent possible under ORS 469.261(1)(c), AHRI requests that ODOE continue to monitor the supply chain shortages and work with AHRI and its members to ensure that products are available on the market by the time this rule goes into effect.

Given this, AHRI will reiterate our concerns from our previous letter:

“If the CTA-2045 requirements become effective on the dates proposed during this supply chain disruption, specifically the shortage of specialty electronic
components, it will make the production of a sufficient number of CTA-2045 compliant units for Oregon extremely challenging.

Ultimately, due to forces outside of industry’s control, there is a risk of creating product shortages. This could lead to an increase in the price of compliant equipment and may result in gaps in access to hot water for families and businesses.”

AHRI appreciates the work done by ODOE in the development of this proposal and encourages ODOE to continue to work with AHRI on the implementation of these CTA-2024 requirements.

Finally, we appreciate the opportunity to provide these comments. Please contact me directly at kbergeron@ahrinet.org.

Sincerely,

Kyle Bergeron
Regulatory Engineer

cc: Helen Walter-Terrinoni, Vice President of Regulatory Affairs, AHRI
June 8, 2022

Wendy Simons, Rulemaking Coordinator
Blake Shelide, Facilities Engineer
Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301


Dear Ms. Simons:

A. O. Smith Corporation (“A. O. Smith”), with global headquarters in Milwaukee, Wisconsin, applies technology and energy-efficient solutions to products manufactured and marketed worldwide. Listed on the New York Stock Exchange (NYSE), the company is one of the world’s largest manufacturers of residential and commercial water heating equipment and boilers, as well as a leading manufacturer of water treatment and air purification products.

In the State of Oregon, A. O. Smith supported passage of the House Bill 2062, which set requires certain residential electric storage water heaters to comply with communications interface standard, CTA-2045-A, and was originally set to become effective for equipment (both heat pump water heaters and electric resistance water heaters) manufactured on or after January 1, 2022. This date was set during 2020 rulemaking and confirmed in HB 2062 in the 2021 Legislative Session as required under ORS 469.261.1

As a result of the Oregon Department of Energy (“ODOE”) stakeholder outreach related to the on-going global supply chain challenges of the sourcing of electric components and microchip sets, water heater manufacturers are still left to shifting their production to products for which they have requisite materials and inventories in hand and stop production of other stock-keeping-units (SKUs) products that are more specialized and rely exclusively on those specialized components. In recognition of these on-going conditions, ODOE did delay the initial compliance date for the CTA-2045-A standard to July 1, 2022.2

However, given the continuing supply constraints, as well as similar compliance granted to water heater manufacturers in the State of Washington, which has a similar requirement for electric storage water heaters, ODOE now proposes to further extend its compliance date to July 1, 2023, under

1 See generally, Notice of Proposed Rulemaking, Chapter 330, Department of Energy, April 26, 2022.

2 Id.
administrative authority vested to it.\(^3\) In this proposed rulemaking ODOE finds that the requirements of ORS 469.261(2)(b) have been met and further postponement of the compliance date to July 1, 2023 is justified.\(^4\)

A. O. Smith agrees and is supportive of ODOE findings and respectfully requests that it postpone the CTA-2045 standard requirement for residential electric storage water heaters until July 1, 2023 as it will result in mitigating financial burdens and opportunity costs for manufacturers who are in the process of continuing to navigate global supply chain disruptions, as well as ensuring an adequate supply of electric storage water heating equipment ensuring that Oregonians will be able to have replacement equipment installed in their homes.

A. O. Smith looks forward to working expeditiously with the Department and remains open to sharing additional information that would assist the Department in its decision-making process regarding A. O. Smith’s request.

Sincerely,

Joshua C. Greene
Corporate Vice President, Government and Industry Affairs
A. O. Smith Corporation
11270 West Park Place
Milwaukee, WI 53224
jcgreene@aosmith.com

\(^3\) ORS 469.261(2)(b), ODOE has the authority to postpone a standard up to two times, each time for up to one year, if either of two criteria are met: 1) Adjoining states with similar minimum energy efficiency standards have postponed the operative date of their corresponding minimum energy efficiency standards; or 2) Failure to modify the operative date of any of the minimum energy efficiency standards would impose a substantial hardship on manufacturers, retailers, or the public.

\(^4\) Given that Washington state has postponed the operative date of their corresponding similar standard (and is in process for additional postponement) and that supply chain issues would cause an effective standard to impose a substantial hardship on manufacturers, retailers, and the public, ODOE has determined that both the criteria in ORS 469.261(2)(b) are met in this case. This delay would represent the final postponement that ODOE could provide administratively by rule under its statutory authority.
June 8, 2022

Via Electronic Mail

Wendy Simons
Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301

Re: Electric Water Heaters – Implementation Date for CTA-2045-A Requirements

Dear Ms. Simons,

The Northwest Energy Efficiency Alliance (NEEA) appreciates the opportunity to comment on the upcoming Oregon Department of Energy rule changes. NEEA is a non-profit organization working to encourage the development and adoption of energy-efficient products, practices and services. Funded by the regional utilities, NEEA is a collaboration of 140 utilities and efficiency organizations working together to advance energy efficiency in the Northwest on behalf of more than 13 million consumers. This unique partnership has helped make the Northwest region a national leader in energy efficiency.

NEEA has been working to advance the market for energy-efficient electric heat pump water heaters (HPWHs) in the Northwest and beyond for more than a decade. This work has included:

- The development and promotion of the Hot Water Solutions program, which helps inform consumers on the benefits of heat pump water heaters and connects them to utility rebates.
- Funding numerous research studies related to heat pump water heaters, including field, laboratory, and market studies.

As of 2022, more than 130,000 HPWHs have been installed in the NEEA region with broad consumer satisfaction. Extrapolating ENERGY STAR sales data through 2020, we estimate more than 750,000 HPWHs have been installed nationwide between 2010 and 2022.

In our work managing the Advanced Water Heating Specifications (AWHS), we work closely with manufacturers on improving the efficiency of HPWHs. We have worked diligently with industry to see improvement in the efficiency of the water heating market in recent years. We believe the next big step in the water heating industry is to make grid connected water heaters available as a resource to the

3 https://hotwatersolutionsnw.org/
4 https://neea.org/resources-reports/browse?q=heat+pump+water+heater
5 Based on regional manufacturer shipment data
6 Northwest Heat Pump Water Heater Initiative Market Progress Evaluation #6, NEEA, p. 142
region to enable integration of renewable energy resources and reduce grid congestion. For this reason, we encourage ODOE to continue on the path toward requiring CTA-2045-A in electric water heaters and believe that implementation of this requirement as soon as is feasible will enable the region to meet energy and climate goals.

NEEA applauds the effort ODOE is taking to align with the state of Washington and other others around a delay in the enforcement of this requirement. NEEA has already postponed the connectivity requirement in the AWHS for one year, and will again postpone our effective date to October 1st, 2022. NEEA believes that implementing this requirement later this year (rather than next year) will be feasible due to our observations of improvements in the supply chain over the course of 2022.

Based on our conversations with manufacturers and other supply chain providers, we believe that supply chain access to components required for connectivity is getting better. Over the last six months, we have seen manufacturers providing HPWHs to the market with connectivity on board. Relevant trends that we are seeing in the market include a reduction in the price of steel and critical semiconductor components like copper, gold, platinum, and palladium. In addition, we are noticing that the increase in the price of diesel coincides with reduced shipping delays at ports, and that the number of ships on hold in Long Beach has reduced from more than forty to two in recent weeks. We believe this indicates that delays in transportation of goods are beginning to resolve and expect that availability of consumer goods will increase following these trends.

Though labor shortages are still a challenge for the semiconductor industry, we have seen companies like Intel and Samsung begin to prioritize fabrication and manufacturing on-shore, which will reduce supply chain restrictions in the medium to long term. We believe that this effort, in addition to the current administration’s efforts to support development of domestic fabrication facilities, will lead to improved access in consumer goods in the coming year.

NEEA would like to emphasize the importance of enforcement of ODOE’s connectivity provision because this flexible load resource is critical to meeting Oregon’s climate goals. Given that it will take a long time for this resource to be available to utilities, we believe that investing in the development of this technology early will support the aggregation of the resource so that it will be ready to utilize by utilities in the near term.

Thank you for the opportunity to provide these comments.

Sincerely,

Nicole Dunbar, P.E.
Energy Codes and Standards Engineer
Direct 503.688.5438

NORTHWEST ENERGY EFFICIENCY ALLIANCE
700 NE Multnomah Street, Suite 1300, Portland, Oregon 97232
503.688.5400 | Fax 503.688.5447 | neea.org
June 8, 2022

Ms. Wendy Simons, Rulemaking Coordinator
Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301

E-mail: wendy.simons@energy.oregon.gov

RE: Energy Efficiency Standards Rulemaking; Proposed Implementation for Electric Storage Water Heaters Bill 2062 (2021)

Dear Ms. Simons

Rheem Manufacturing Company (“Rheem”) submits the following comments regarding Oregon Department of Energy’s (ODOE) proposed rule to postpone the effective date at ORS 469.233(16)(a) requiring electric storage water heaters to have a modular demand response communications port compliant with the March 2018 version of the ANSI/CTA-2045-A communication interface standard and application layer.

Rheem is an industry leader in total heating, cooling, refrigeration and water heating solutions and one of the few global brands with product offerings covering residential and commercial heating, cooling, conventional and hybrid storage water heaters, tankless water heaters, solar water heating systems, pool and spa heaters, commercial boilers, residential hydronic and geothermal systems, commercial refrigeration products, indoor air quality accessories, and replacement parts for all categories. Rheem is headquartered in Atlanta, Georgia, and has U.S. based manufacturing facilities in Alabama, Arkansas, California, Connecticut, and North Carolina.

Rheem generally supports the proposed rule under ORS 469.261(1)(c) and appreciates ODOE’s ongoing efforts to monitor pandemic related supply chain issues associated with meeting the requirement that electric water heaters be equipped with CTA-2045-A controls. In addition to providing a reasonable delay, alignment on a common effective date with Washington State Department of Commerce is critical to support new product introduction and to coordinate market distribution for the region. We encourage ODOE to consider regional distribution issues and proactively work with Washington State Department of Commerce to align on a new effective date.

While Rheem has seen improvement in the supply of key components for controls, it will take a lead time of 3-months to schedule production and reset distribution channels
for electric water heaters subject to the above rule. Consistent with our prior comments, a delay until at least January 1, 2023, will be acceptable for Rheem.

We appreciate the opportunity to provide these comments. Please do not hesitate to contact me directly if there are questions.

Sincerely,

Joe Boros
Regulatory Affairs Director
Rheem Manufacturing Company

cc: Karen Meyers