



July 24, 2020

Ms. Wendy Simons  
Oregon Department of Energy (ODOE)  
550 Capitol Street, NE, First Floor  
Salem, OR 97301

**Re: OAR 330-092-0015; 330-092-0020 – Appliance Efficiency Standards – Utility Demand Response Electric Storage Water Heaters**

Dear Ms. Simons,

On behalf of Bradford White Corporation (BWC), I want to thank you for providing an opportunity to comment on the State of Oregon’s appliance minimum energy efficiency standards and test methods, specifically as they relate to creating a utility demand response program for electric storage water heaters. We are pleased to be a part of this important conversation.

BWC is an American-owned, full-line manufacturer of residential, commercial, and industrial products for water heating, space heating, combination heating, and water storage products. In the State of Oregon, a significant number of individuals, families, and job providers rely on our products for their hot water and space heating needs.

We are encouraged by ODOE’s efforts to harmonize these proposed rules as closely as possible with WAC 194-24-180 in the State of Washington, including the compliance date for this regulation of January 1, 2022. BWC was one of many stakeholders that worked throughout 2019 to ensure the Washington Department of Commerce enacted a rule that accomplished the state’s energy efficiency goals, while encompassing as much stakeholder feedback as possible.

In the absence of any federal regulations pertaining to utility demand response electric storage water heaters, it is essential for state governments to align their appliance energy efficiency policies for these products as closely as possible. This not only avoids burdens and confusion among consumers, utilities, manufacturers, and other stakeholders, by avoiding a patchwork of regulatory requirements across states, but also potentially saves ODOE valuable time and resources from not having to reexamine many issues that similar stakeholders have already discussed.

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It will, however, be very important for utilities to make a home or building owner aware of what types of difficulties they may encounter with a utility demand response electric storage water heater that are utility-related as opposed to manufacturer-related. If such a product does not provide an end user with adequate hot water, and the same end user is not fully informed as to why, it is likely that they will develop a negative perception of the product and/or the product manufacturer. Either is potentially detrimental to the growth of these types of programs.

Given these concerns, BWC believes that ODOE could greatly assist in providing clarity to home and building owners by surveying utility stakeholders to ascertain, at a minimum, the following information:

- Will utility schedules for these products be stored in a central database?
- What will the effect be on the consumer if these schedules change? Will this be seamless to the consumer and will the consumer be notified?
- Will utilities put procedures in place for when buildings participating in the connected water heater program change ownership? How will the new owner be made aware of the building's participation?

Once again, we encourage ODOE to closely align their efforts in creating a utility electric storage water heater program with the provisions that have been enacted in WAC 194-24-180. We would also urge the Department to resist any suggested departures from this rule as the rulemaking process continues for both OAR 330-092-0015 and OAR 330-092-0020 pertaining to utility demand response electric storage water heaters.

Thank you for continuing to include BWC and other stakeholders in this important conversation. Please let me know if you have any questions or would like any additional information.

Respectfully Submitted,

Bradford White Corporation

Eric Truskoski  
Director of Government and Regulatory Affairs

Cc: B. Carnevale; M. Taylor; B. Hill; L. Prader; C. Sanborn; J. Robertson; K. Doyle; B. DeJager; J. Ferrante; B. Wolfer

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July 24, 2020

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

RE: Oregon Department of Energy (ODOE) 2020 Energy Efficiency Standards Rulemaking

Dear Ms. Simons,

The Appliance Standards Awareness Project (ASAP) submits these comments in response to ODOE's appliance energy efficiency standards rulemaking and draft rules. We reiterate our strong support for the efficiency standards proposed by ODOE and recommend that additional product standards be added that would further reduce energy use, reduce greenhouse gas emissions, and increase consumer savings. Please refer to our June 10, 2020 comments for specific recommendations.

We offer these additional comments on the proposed rules:

**Consider alternate listing and labeling language for products referencing ENERGY STAR database and labels.**

In the draft regulations, we call your attention to Section 330-092-0025 (requirements for product listing) and Section 330-092-0045 (requirement for physical labeling). As written, language that references the ENERGY STAR database and label may not produce the desired result of listing and labeling products that meet the proposed efficiency standards. For example, residential ventilating fans meeting the proposed Oregon standards (ENERGY STAR Version 3.2), but not meeting the newer ENERGY STAR version 4.1 will not be listed in the ENERGY STAR database or will not have an ENERGY STAR label. This applies to residential ventilating fans now and will apply to commercial dishwashers and water coolers when ongoing ENERGY STAR revisions are completed. For residential ventilating fans, the U.S. Climate Alliance is working with the Home Ventilating Institute to create a Certified Product Directory that may be a good solution for listing.

**ODOE should add authority to update standards.**

We recommend that ODOE propose legislative amendments to the Oregon legislature that would authorize ODOE to update existing standards without subsequent legislative approval. This would allow ODOE to align with neighboring states should they amend their efficiency standards and enable ODOE to update to newer ENERGY STAR or WaterSense versions. Regulatory agencies in several states including Colorado, Connecticut, Hawaii, and Washington have the authority to update existing standards. We provide sample language below.

The Commissioner may adopt regulations, in accordance with the provisions of Chapter **[number of section in state law dealing with setting regulations]**, to establish increased efficiency standards for the products listed or incorporated in **[number of section listing products]**. In considering such amended standards, the Commissioner, in consultation with the **[heads of other appropriate departments]**, shall set efficiency standards upon a determination that increased efficiency standards would serve to promote energy or water conservation in the state and would be cost effective for consumers who purchase and use such new products, provided that no new or increased efficiency standards shall become effective within one year following the adoption of any amended regulations establishing such increased efficiency standards.

ASAP would also like to take the opportunity to respond to the Plumbing Manufacturing Institute's (PMI's) assertion that Oregon's faucet and showerhead standards would result in unintended consequences for wastewater and drinking water infrastructure, based on a 2017 white paper authored in part by the California Urban Water Agencies (CUWA).<sup>1</sup> The paper surveyed impacts to water and wastewater utilities during California's extensive drought, which lasted between 2013 and 2016. It is not representative of how water efficiency standards might impact the state of Oregon. Specifically, California's Governor issued an executive order in 2015 requiring water suppliers to reduce water production by 25 percent from pre-drought levels within one year and requiring Californians to dramatically reduce their consumption through a variety of measures. Californians responded by "reducing their use by as much as 31 percent in July 2015." Undoubtedly, a 31 percent reduction in water use in response to a severe drought emergency will not be replicated by the gradual installation of water-efficient showerheads and faucets in Oregon. Even if these standards were able to achieve these dramatic and immediate reductions, CUWA notes in a 2019 follow-up brief that "Given time and resources, utilities can and will adapt to declining flows<sup>2</sup>."

Thank you for considering these comments.

Sincerely,

Marianne DiMascio, State Policy Manager  
Appliance Standards Awareness Project

Attachments: Copy of ASAP June 10, 2020 comments to ODOE

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<sup>1</sup> "Adapting to Change: Utility Systems and Declining Flows." California Urban Water Agencies. [https://www.waterrf.org/system/files/resource/2019-07/4736\\_1.pdf](https://www.waterrf.org/system/files/resource/2019-07/4736_1.pdf). November 2017.

<sup>2</sup> "Adapting to Change: Informing Water Use Efficiency and Adjusting to Declining Flows." California Urban Water Agencies. <https://www.waterrf.org/system/files/resource/2019-10/ProjectPaper-4736-1.pdf>. October 31, 2019.

June 10, 2023

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

Dear Ms. Simons and Mr. Shelide,

Please accept these comments from the Appliance Standards Awareness Project (ASAP) for the Oregon Department of Energy's (ODOE) 2020 Energy Efficiency Standards Rulemaking.

ASAP supports the efficiency standards proposed by ODOE at the May 20<sup>th</sup> Advisory Meeting. ASAP estimates that the proposed efficiency standards will save the citizens of Oregon 230 gigawatt-hours of electricity and \$40 million and avoid the emission of 80,000 metric tons of carbon dioxide annually by 2025.

ASAP urges ODOE to consider adopting additional product standards to capture greater energy and bill savings and to further reduce emissions for Oregonians. The products we recommend are in the ASAP 2020 model bill and are all cost-effective for consumers and businesses.

### **Appliance Standards for ODOE's Consideration**

#### *Air Purifiers*

Air purifiers use a significant amount of energy, and Consumer Reports has written that some inefficient air purifiers barely clean the air at all and cost hundreds of dollars a year to maintain.<sup>3</sup> More and more people are adding this appliance to their homes, as well. An estimated one in four American households owns an air purifier.<sup>4</sup> These appliances are an excellent candidate for standards in Oregon.

ASAP recommends a standard based on a combination of ENERGY STAR Version 1.2, which took effect in 2004, and ENERGY STAR Version 2.0, which was published in 2019. ASAP's Model Bill details this specification.<sup>5</sup> ASAP estimates that about 35% of air purifier models on the market today would meet the proposed standard.

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<sup>3</sup> Santanachote, Perry. "Best and Worst Air Purifiers of 2020." Consumer Reports. <https://www.consumerreports.org/air-purifiers/best-air-purifiers-of-the-year/>. January 10, 2020.

<sup>4</sup> Santanachote, Perry. "Air Purifiers and the Cost of Clean Air". *Consumer Reports*. <https://www.consumerreports.org/air-purifiers/air-purifiers-and-the-cost-of-clean-air/>. October 25, 2019.

<sup>5</sup> Appliance Standards Awareness Project and American Council for an Energy Efficient Economy. Model Act for Establishing State Appliance and Equipment Energy and Water Efficiency Standards. [https://appliance-standards.org/sites/default/files/2020\\_Model\\_Bill\\_ASAPSeptember30\\_2019.pdf](https://appliance-standards.org/sites/default/files/2020_Model_Bill_ASAPSeptember30_2019.pdf). Updated October 2019.

Customers will still have options for affordable air purifiers if Oregon adopts standards for them. According to an Internet search conducted by ASAP in 2020, Home Depot, Lowe's, and Walmart each sold at least three different models of air purifiers that were both energy-efficient and cost less than \$100.

#### *Commercial Ovens and Hot Food Holding Cabinets*

Adding standards for commercial ovens and updating existing standards for hot food holding cabinets would cut energy use by 4 gigawatt hours and reduce emissions by 1.6 thousand metric tons in 2025.

We recommend commercial oven standards based on ENERGY STAR Version 2.2, which took effect in 2015. Convection ovens at this level consume about 15% less energy than standard models.

We recommend that ODOE update Oregon's hot food holding cabinet standard to ENERGY STAR Version 2.0, which took effect in 2011 instead of copying Washington's standard which is based on the 2003 ENERGY STAR Version 1.0 and the 2011 ENERGY STAR test procedure. In 2011, 62% of hot food holding cabinet models already qualified for ENERGY STAR Version 1.0. We expect that the market share is much higher today, nearly ten years later.

#### *Electric Vehicle Supply Equipment (EVSE)*

With Oregon's ambitious Zero Energy Vehicle goals and the commitment to install charging infrastructure throughout the state, we suggest that ODOE adds standards for EVSE (also called EV chargers). We recommend a standard for Level 1, Level 2, and combined chargers based on ENERGY STAR Version 1.0, which took effect in December 2016. EV chargers meeting Version 1.0 use about 40% less energy than standard models primarily by limiting the energy used when in standby mode.

#### *General Service Light Bulbs*

Even though states are preempted from enforcing standards for many light bulbs due to federal preemption, there are still a number of light bulbs that are not preempted, and which Oregon can regulate. These include the following common household bulbs: globe-shaped bulbs used in bathroom vanities, as well as certain reflector, 3-way, and several specialty bulbs (see Appendix A). LED replacements are available for each of these light bulb types.

Standards for non-preempted general service light bulbs would remove energy-wasting bulbs from the shelves, save significant amounts of energy and money, and help the state to meet Oregon Climate Action Plan goals. Five states, including neighboring California and Washington have already adopted light bulb standards.

As ODOE is aware, a number of states (including Oregon) and advocacy organizations are challenging in court the federal government's 2019 decisions to rescind a broad definition of general service lamp issued in 2017 and determine that the automatic backstop standard in federal law does not apply. We expect the states and other plaintiffs to prevail in this suit, but, since litigation is by its nature uncertain and because Oregon adds to its state standards infrequently, we urge the state to address those bulb types not now subject to federal preemption in the current rulemaking.

#### *Toilets, Urinals, and Spray Sprinkler Bodies*

ASAP recommends that ODOE consider standards on toilets, urinals, and spray sprinkler bodies. Although water conservation is not in the Department of Energy's purview, these three standards combined could save the state secondary energy in the form of pumping and wastewater treatment

reductions. ASAP's 2017 *States Go First* report estimates that, "Energy embedded in water is equal to about 138 billion kWh annually, or roughly 3.5% of current total US annual electricity consumption".<sup>6</sup> Although our organization has not tried to estimate the secondary energy savings for Oregon, we believe the reduction in energy consumption from reduced water pumping merits investigation on the part of ODOE during this legislative research period.

### **Support for Appliance Standards proposed by ODOE**

ASAP supports the new and updated appliance standards proposed by Oregon Governor Kate Brown and ODOE. Below are notes outlining the reasons behind our support.

#### *High Color Rendering Index (High CRI) Fluorescent Lamps*

DOE revised national standards for fluorescent tubes that became effective in 2012 to eliminate the largest, least efficient bulbs (T12s). Unfortunately, the original federal law dating from 1992 exempted several specialty bulbs including fluorescent tubes with color rendering index (CRI) of 87 or greater, creating a loophole. Prior to DOE increasing the standard in 2012, these bulbs were rare and expensive. However, manufacturers exploited the exemption as a loophole and have now produced millions of inefficient, high-CRI T12 bulbs that are sold at very low retail prices. ASAP estimates national shipments of 14.2 million lamps in 2022. This high-CRI loophole undercuts the federal standard, allowing fluorescent tubes that are 44% less efficient than the standards to remain on the market. States can close the loophole by adopting state standards for high CRI fluorescent tubes. Consumers and small businesses are the most likely to still use T12 tubes and bear the economic burden of the loophole.



Drop-in LED replacement products (see image) are readily available and are very cost effective. These LED tubes are also available in high-CRI versions for the rare cases where extremely good color rendering is necessary. In the rare case where a consumer cannot use an LED tube, the more efficient T8 fluorescent tubes are still cost effective. According to the California Energy Commission, replacing one 4-foot T12 lamp with a T8 fluorescent tube lamp could save nearly 550 kWh over the lifetime of the bulb; replacing it with an LED tube lamp could save close to 1600 kWh over the same period. Using 2018 average Oregon electricity rates, electricity bill savings range from about \$60-170 and \$50-140 for consumers and businesses, respectively.<sup>7</sup>

ASAP estimates that standards for high-CRI lamps will save Oregonians 27 gigawatt-hours of electricity and avoid the emission of 6,500 metric tons of carbon dioxide annually in 2025, or the equivalent of removing 1,400 passenger vehicles from the road.

Oregon could consider adding two other tube lamps that were exempt from the federal standards: impact-resistant and cold temperature bulbs. Like high-CRI lamps, both are exempt from federal standards and could become new loopholes.

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<sup>6</sup> Mauer, Joanna, Andrew deLaski, and Marianne DiMascio. "States Go First: How States Can Save Consumers Money, Reduce Energy and Water Waste, and Protect the Environment with New Appliance Standards." <https://appliance-standards.org/sites/default/files/States%20Go%20First.pdf>. July 2017.

<sup>7</sup> California Energy Commission draft staff report analysis of linear fluorescent exempt from federal preemption. <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=18-AAER-08>. June 27, 2019

### *Computers and Computer Monitors*

We agree with Oregon’s proposal to align computer and computer monitor standards with standards in California. Doing so would also align with four states (Colorado, Hawaii, Vermont, and Washington) that have adopted the California computer standards. We recommend that Oregon include a provision similar to one in Washington’s law that would allow the state to amend the standards to align with updated California standards.<sup>8</sup>

### *Faucets and Showerheads*

The California Energy Commission estimates that there is no additional incremental cost for an efficient faucet over an inefficient one; that is, it costs no more to buy a standards-compliant product than it does to buy a wasteful product.<sup>(9)</sup> Oregon officials should end the sale of wasteful products that confer no economic benefit to citizens of the state while also avoiding unnecessary carbon emissions and protecting the state’s water resources. The latter is particularly important due to the increasing frequency of droughts in Oregon.

Faucet standards are particularly important during the nation’s COVID-19 crisis. Bradley Corporation, a large plumbing fixture manufacturer, recently shared results from a 2020 survey showing that 90% of respondents say they are “washing their hands more frequently or more thoroughly or longer”.<sup>9</sup> 88% of respondents said they “are extremely or somewhat likely to maintain their increased hand washing regimen once the virus has passed.” This good news suggests that the majority of Americans are practicing responsible hygiene to mitigate the spread of COVID-19, but these behavioral changes also require the action of Oregon officials to make sure that this beneficial practice does not create an environmental problem as it solves a health problem.

ASAP also understands that Oregon seeks to align its showerhead standards with the California Code of Regulations, which specifies that showerheads sold in California must not exceed 1.8 gpm (gallons per minute) at 80 psi (pounds per square inch). For ASAP’s 2020 Model Bill and accompanying analysis, we analyzed showerhead standards at the WaterSense level (2.0 gpm at 80 psi). We support Oregon’s consideration of the lower 1.8 gpm limit adopted by neighboring states. Meeting California’s standard will ensure that Oregonians save even more water, energy, and money than is outlined in the [Oregon state savings table](#).

According to the Environmental Protection Agency, which administers the WaterSense efficiency program, customers nationwide already have a lot of choice when it comes to high-efficiency showerheads. “To date, approximately 63 percent of WaterSense labeled showerheads (as defined by the

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<sup>8</sup> The [Washington law](#) includes the following provision: “The department may adopt by rule a more recent version of any standard or test method established in this section, including any product definition associated with the standard or test method, in order to maintain or improve consistency with other comparable standards in other states.”

<sup>9</sup> “Vast Majority of Americans Increase Hand Washing Due to Coronavirus”. Bradley Corporation. <https://www.bradleycorp.com/news/vast-majority-of-americans-increase-hand-washing-due-to-coronavirus>. April 15, 2020.



American Society of Mechanical Engineers) have a maximum flow rate of 1.8 gpm or less, and 77 percent of models certified since 2017 have a maximum flow rate of 1.8 gpm or less.”<sup>10</sup>

*Commercial Fryers, Dishwashers, and Steam Cookers*

Commercial fryers, dishwashers, and steam cookers are primarily leased by restaurant and facility owners to operate their businesses. A restaurant owner replacing three products with those meeting standards could save about \$4,500 per year on electricity, gas, and water bills.

All three standards are cost-effective for businesses over the 12- to 13-year average lifetime of these products. For example, a restaurant owner replacing an inefficient steam cooker with one meeting the proposed standards would save about \$3,200 per year on energy and water bills, paying back the higher purchase price in just one year. Over the 12-year life of the steam cooker, that’s nearly \$40,000 in utility bill savings.

*Residential Ventilating Fans*

We recommend the current ENERGY STAR specification (Version 4.1) which took effect in 2015 for bathroom and utility fans. (We do not recommend including range hoods.) About 80% of the bathroom and utility room ventilating fans in the Home Ventilating Institute (HVI) database meet ENERGY STAR Version 4.1. We are aware that a manufacturer has recently raised concerns about cost-effectiveness of Energy Star Version 4.1 and are currently investigating those claims.

*Portable Electric Spas*

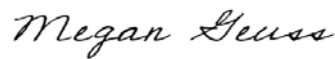
Updating Oregon’s existing standards for portable electric spas to meet the ANSI/APSP/ICC-14 2019 specification is a significant way to save energy in the state. In Oregon, ASAP estimates that adopting the most recent portable electric spa standards could save customers 27.7 gigawatt-hours of electricity and avoid the emission of 6.7 thousand metric tons of carbon dioxide annually by 2025. This is the equivalent of taking nearly 15,000 passenger vehicles off the road.

ASAP thanks ODOE for the opportunity to comment on this rulemaking.

Sincerely,



Marianne DiMascio, State Policy Manager  
Appliance Standards Awareness Project



Megan Geuss, Policy Associate for Water Efficiency  
Appliance Standards Awareness Project

See Appendix A

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<sup>10</sup> Notice of Recent Specifications Review and Request for Information on WaterSense Program. Federal Register Vol. 85, No. 70. <https://www.govinfo.gov/content/pkg/FR-2020-04-10/pdf/2020-07602.pdf>. (Friday, April 10, 2020).

Appendix A

**A sampling of high-sales volume bulb types that are not covered by federal standards and free from preemption<sup>11</sup>**

<p>Several types of incandescent bulbs</p>	<p>Shatter resistant</p> 	<p>3-way</p> 	<p>High-lumen output</p> 
<p>Many decorative medium screw base bulbs within certain wattages, most less than 40 watts</p>	<p>Medium-base globe shaped</p> 	<p>Medium-base candelabra</p> 	<p>T-shaped bulb ≤ 40 watts or ≥ 10 inches</p> 
<p>Certain incandescent reflector bulbs</p>	<p>Bulged or elliptical reflectors rated 50 watts or less (BR30, BR40, ER30, ER40) or 65 watts (BR30, BR40, ER40)</p> 		<p>Reflector rated 45 watts or less (R20)</p> 
<p>Reflector lamps less than 2.25 inches in diameter</p>	<p>MR 16</p> 	<p>MR16 medium base</p> 	

*Compiled by the Appliance Standards Awareness Project*

<sup>11</sup> Not an exhaustive list.

Public Comment received Friday, July 24, 2020 3:18pm

Good afternoon,

Avista would like to submit the following comments in regard to the appliance standard for fryers, dishwashers, and steam cookers. A preferred approach over increasing standards is to continue to incent new high efficiency equipment through Energy Trust of Oregon. Our concern is that by changing the appliance standard baseline it will have unintended consequences for our communities. For example, the cost differential from a standard fryer to an Energy Star fryer could be almost double the cost. While this investment is cost-effective for the energy saved it may move buyers to a secondary used market who can't afford Energy Star.

Sincerely,

**Lisa McGarity**, Energy Efficiency Program Mgr

580 Business Park Dr, Medford, OR 97504

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## Consumer Federation of America

Via email

June 17, 2020

To: Wendy Simons and Blake Shelide  
Oregon Department of Energy  
550 Capitol St. NE, 1st Floor  
Salem, OR 97301

RE: Support for Standards Proposed by ODOE at May 20<sup>th</sup> Advisory Meeting

Dear Ms. Simons and Mr. Shelide,

The Consumer Federation of America (CFA) is pleased to respond to Oregon's Department of Energy (ODOE) request for comments on updating Oregon's energy efficiency standards. CFA is an association of more than 250 nonprofit organizations that was established in 1968 to advance the consumer interest through research, advocacy, and education. For more than two decades, we have been advocating for cost-effective energy and water efficiency standards as they benefit consumers through lower utility bills.

CFA supports the energy efficiency standards proposed by ODOE at the May 20<sup>th</sup> Advisory Meeting. They include standards for consumer products such as computers, common ventilating fans, faucets and showerheads. According to the Appliance Standards Awareness Project (ASAP), Oregonians will save \$40 million annually by 2025 if the standards are adopted, these savings will rise to almost \$120 million annually by 2035. We applaud ODOE for undertaking this important effort.

While there are significant savings with the standards currently proposed, we would like to suggest ODOE include efficiency standards for additional consumer products, specifically air purifiers, toilets and electric vehicle supply equipment, which according to the ASAP would save Oregon consumers and businesses an additional \$20 million annually by 2035.<sup>1</sup> ODOE should also consider moving ahead on standards for certain general service light bulbs that may not be preempted by national standards, as energy savings quickly pay for the slightly higher purchase price. A national public

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<sup>1</sup> 2020 State Appliance Standards Recommendations for Oregon, Appliance Standards Awareness Project, June 2020, [https://appliance-standards.org/sites/default/files/state\\_savings\\_state\\_standards/Oregon.pdf](https://appliance-standards.org/sites/default/files/state_savings_state_standards/Oregon.pdf)

opinion poll conducted by CFA in March 2019<sup>2</sup> found that 64% support standards for uncovered lighting products, such as reflector, three-way and globe light bulbs as well as decorative lights. Adding these products provides even greater opportunity to reduce energy and water waste, lower consumer utility bills, and cut emissions.

With the currently proposed standards as well as the four additional products mentioned above, data provided by ASAP indicates the annual savings for Oregon consumers and businesses by just 2025 to be:

- over \$45 million on utility bills;
- over 260 gigawatt hours of electricity;
- over 1.5 billion gallons of water;
- and 86,000 metric tons of carbon.

We applaud ODOE moving forward on energy and water efficiency standards, and strongly urge you to consider including air purifiers, electric vehicle supply equipment, toilets and certain general service light bulbs which may not be subject to federal standards.

While we have focused on certain consumer products, we also encourage you to consider the additional products proposed by the Appliance Standards Awareness Project. We understand that ASAP has provided you with good information on the benefits of a host of products used by consumers and businesses. When the commercial and industrial sectors save on their operating costs, consumers benefit indirectly through lower costs of goods and services.

In closing, CFA appreciates your action thus far on the beneficial, pro-consumer standards that are being proposed, and we urge you to give serious consideration to including additional products that will provide even greater benefits to Oregonians. This will clearly demonstrate Oregon's continued commitment to being a leader in energy and water efficiency.

Thank you for your consideration.

Sincerely,



Richard Eckman  
Energy Research Associate  
Consumer Federation of America

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<sup>2</sup> The survey was conducted for CFA by Engine International by cell phone and landline on March 21-24, 2019, using a representative sample of 1,007 adult Americans. The survey's margin of error is plus or minus 3.09 percentage points at the 95% confidence level.



Oregon  
Environmental  
Council

July 24, 2020

Ms. Wendy Simons and Mr. Blake Shelide  
Oregon Department of Energy  
550 Capitol St. NE, 1st Floor  
Salem, OR 97301

**RE: ODOE Appliance Energy Efficiency Standards Rulemaking Comments**

Dear Ms. Simons and Mr. Shelide:

Thank you for the opportunity to comment on the Oregon Department of Energy's (ODOE) rulemaking on appliance energy efficiency standards. Climate Solutions is a regional non-profit working to accelerate clean energy solutions to the climate crisis. Oregon Environmental Council brings Oregonians together to protect our water, air and land with healthy solutions that work for today and for future generations.

We support ODOE moving forward with the proposed updates, but encourage ODOE to include additional appliance-types in the current update. As ODOE has noted, in addition to reducing greenhouse gas emissions, energy efficient appliances can also save Oregonians a substantial amount of money on utility bills. As a result, ODOE should maximize this win-win solution in the current rulemaking.

The Governor's Executive Order on climate change - EO 20-04 - provides specific direction to ODOE to update appliance energy efficiency standards consistent with the more stringent standards of other West Coast states. The Executive Order mandates a list of 10 appliances be included in the update, but it is not an exclusive list and leaves ODOE with the discretion to include other categories of products in the rulemaking. At the same time, the Executive Order through a more general directive requires the agency to "exercise any and all authority and discretion" to help facilitate achievement of the state's greenhouse gas goals. Taken together, these directives provide the basis for ODOE maximizing the current rulemaking.

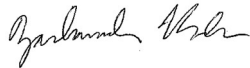
Other commenters - particularly the NW Energy Coalition - have laid out recommendations on the additional appliances that could be included in this rulemaking. We support those recommendations.

Whether or not ODOE expands the current rulemaking to cover additional appliances, ODOE should also work as part of the current rulemaking effort to:

- Ensure a clear pathway for future updates. This is an ever-evolving area that will continue to require updates as more efficient appliances become available. Further, the Executive Order requires that ODOE periodically evaluate and update the standards to remain at least equivalent to the most stringent standards among West Coast jurisdictions. It's been over six years since Oregon's appliance standards were last updated. We cannot afford a gap like that in the future as Oregonians miss out on needed emissions reductions and cost savings. Unlike many other states, ODOE's updates have an added step of needing approval by the Legislature. ODOE could work with the Legislature as part of the legislation associated with this rulemaking to allow ODOE further discretion or authority moving forward. That's just one example, but there are likely other ways ODOE could help pave the way for future updates and those should be considered.
- Facilitate access to the energy efficient appliances for those who need them most. Appliance energy efficiency standards can help reduce energy burden by providing long-term cost savings for low-income families and communities. Echoing other commenters, we encourage ODOE to work in close partnership with frontline-serving organizations to help ensure that the energy efficient appliances are accessible to the consumers who need them the most.

Thank you again for the opportunity to comment and please feel free to be in touch with any questions.

Sincerely,



Zachariah Baker  
Oregon Policy Manager  
Climate Solutions



Nora Apter  
Climate Program Director  
Oregon Environmental Council

July 23, 2020

Director Janine Benner  
Oregon Department of Energy  
550 Capitol St. NE, 1st Floor  
Salem, OR 97301

**Re: CTA Comments on Appliance Energy Efficiency Standards - Draft Rules**

Dear Director Benner:

The Consumer Technology Association™ (CTA) respectfully submits these comments to express our concerns with the computer and computer monitor standards outlined in the [Draft Appliance Energy Efficiency Standards Rules](#) in advance of the July 23, 2020, Public Hearing. The draft rules call for the adoption of the California Energy Commission (CEC) standards for computers and computer monitors for sale in Oregon, which may have unintended consequences as CTA will outline below.

As North America's largest technology trade association, CTA® is the tech sector. Our members are the world's leading innovators – from startups to global brands – helping support more than 18 million American jobs. CTA represents the major brands of computers and computer monitors. For many years, CTA has supported and advanced energy efficiency in consumer technology as part of the industry's broader commitment to environmental sustainability. Our industry has achieved real results – more consumer products than ever are using *less energy*.<sup>1</sup> We share Oregon's goal of increasing energy efficiency, but we do not believe the approach outlined in these draft rules does anything to achieve energy or cost savings for Oregonians as it relates to the standards for computers and computer monitors.

**A “west coast” appliance market for computers and monitors does not exist.** While we understand that the goal of adopting the California Energy Commission (CEC) standard (as Washington has done) is to create a “west coast” market, that action is ultimately unnecessary for Oregonians. The market for computers and computer monitors is the U.S. / North American market. A “west coast market”, or for that matter an “east coast market” or a “Midwest market”, does not exist for computers and monitors. CTA's members do not make products specific to a state or even a region of the country. Rather, manufacturers design and make these products to meet the most stringent standard found in their

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<sup>1</sup> A peer-reviewed study commissioned by CTA and produced by Fraunhofer USA finds the number of tech devices in U.S. homes has increased 21 percent since 2010, but those devices now account for 25 percent less residential energy consumption over that same time. This landmark energy efficiency achievement is due to the consumer tech industry's investments and innovation. These achievements weren't accomplished through mandated state or federal requirements. (Urban, Roth, Singh & Howes. “Energy Consumption of Consumer Electronics in U.S. Homes in 2017”. December 2017. Available at: <http://www.cta.tech/cta/media/policy/images/policyPDFs/Energy-Consumption-of-Consumer-Electronics-in-U-S- Homes-in-2017.pdf>)



distribution market which, for computer and computer monitor manufacturers, is the CEC standard for the U.S. / North American market. In other words, the CEC standard is the de facto national standard and Oregonians already receive the energy and cost savings benefits of the CEC standard being in place. CTA has not seen an example in any state, including Oregon, where a consumer technology product subject to a CEC standard is offered for sale that does not meet the CEC standard.

**Oregon claiming additional cost or energy efficiency savings for its residents is misleading while also increasing regulatory burden on industry.** CTA is concerned with Oregon claiming energy efficiency and greenhouse gas emissions savings for standards already in effect in the state. This is misleading to residents as Oregon is not achieving additional energy or cost savings for residents by adopting the CEC standard. As noted above, Oregonians already receive the benefit of the CEC standard regardless of requiring industry to operate under a regulatory scheme in Oregon for a California standard they are already complying with. CTA's members would prefer to focus resources where meaningful progress on energy efficiency can be made, not spend resources demonstrating compliance for products already available to Oregonians. Similarly, efforts by the Oregon Department of Energy (ODOE) should focus on actions that will result in both energy and cost savings for residents.

**Unintended consequences of adopting another state's standards.** CTA is concerned that adoption of another state's regulations could cause unintended consequences that negatively impact the availability of consumer technology products for Oregonians. A prime example of an unintended consequence was when Oregon adopted the CEC standards for televisions several years ago. The way the CEC regulations were referenced did not allow Oregon to keep pace with changes made in California. California subsequently amended their regulations, resulting in Oregon having a different standard than California. Since manufacturers do not make different TVs for different states, there was potential for televisions to be pulled from shelves or blocked from online sales to Oregonians until a fix was made through the Oregon legislative process.

The proposed draft rule follows a similar path. The draft rule in OAR 330-092-0020(10) references the California regulations for computers and computer monitors adopted on May 10, 2017 and amended on November 8, 2017. It is likely that the CEC standard will evolve over time. As written, the current language would not allow Oregon to keep pace with amendments to California's regulations. A different standard in Oregon means a similar situation to the above—the potential for computers and computer monitors to be pulled from shelves or blocked from online sales until a fix can be made. The concern around unintended consequences is a very real and valid concern for industry and demonstrates how Oregon's adoption of the CEC standards as currently written is not only unnecessary but possibly harmful to the availability of these products for Oregonians.

If ODOE moves forward with the inclusion of computers and computer monitors in the final rule, **CTA strongly encourages ODOE to incorporate language to provide the authority to keep pace with changes to California's regulations.** Sample language could include the following which is taken from Washington state [[RCW 19.260.040\(1\)](#)]:

“The department may adopt by rule a more recent version of any standard or test method established in this section, including any product definition associated with the standard or test method, in order to maintain or improve consistency with other comparable standards in other states.”

Such language would allow ODOE to realign Oregon's energy efficiency standards to California standards whenever California's standards are updated without having to go through the time-consuming process of a statutory change. This language also clarifies that ODOE would not have broad authority to adopt new energy efficiency standards for computers and computer monitors without it being triggered by a change in California's standards. **If this language is unable to be incorporated into the final rule, CTA strongly encourages the language to be adopted into the forthcoming legislative concept from ODOE for the 2021 legislative session.**

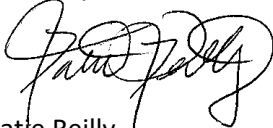
**Unclear manufacturer versus sales restrictions.** CTA is concerned that the current proposed language in 330-092-0015(10) underlined below could be misinterpreted to require both a manufactured and sales date requirement:

Computers and computer monitors: The standards in OAR 330-092-0020(10) are effective for computers and computer monitors that are manufactured on or after January 1, 2022, and subsequently sold, offered for sale, or installed in Oregon.

While the intent of the language may be that it is applied to computers and computer monitors manufactured on or after January 1, 2022 and the underlined portion just clarifies the authority over products sold in Oregon only, the language is ambiguous and alludes to a restriction for any computer or computer monitor manufactured prior to January 1, 2022 but sold after that date. Removal of the underlined portion in the proposed language above would provide the necessary clarity that ODOE only intends to restrict the sale of computers and computer monitors manufactured after January 1, 2022, regardless of when the product is sold, offered for sale, or installed in Oregon. **CTA requests that the underlined portion be removed in the final rule.**

**Conclusion.** CTA and its members are firmly committed to energy efficiency across our industry. For over 15 years, the industry has worked aggressively on energy efficiency. We're one of the only sectors that actively tracks the energy usage of our products, as quantified in CTA's triennial energy efficiency studies. Industry and policymakers share the goal of energy efficiency and conservation, but there are many paths to that goal. We do not believe that the approach outlined in the draft rules is an effective path, and **CTA respectfully opposes the computer and computer monitor provisions.** CTA appreciates the opportunity to voice our concerns and looks forward to working with ODOE on ways to make meaningful energy efficiency progress in Oregon.

Sincerely,



Katie Reilly  
Director, Environmental and Sustainability Policy  
[kreilly@cta.tech](mailto:kreilly@cta.tech)  
703-625-0054

cc: Wendy Simons, Oregon Department of Energy  
Blake Shelide, Oregon Department of Energy



**Good for the Economy.  
Good for the Environment.**

July 23, 2020

Ms. Wendy Simons and Mr. Blake Shelide  
Oregon Department of Energy  
550 Capitol St. NE, 1<sup>st</sup> Floor  
Salem, OR 97301

RE: SUPPORT – Oregon Department of Energy 2020 Energy Efficiency Standards Rulemaking

Dear Ms. Simons and Mr. Shelide,

On behalf of Environmental Entrepreneurs (E2) and our nearly 500 Oregon members and supporters, I am writing to offer our strong support for the updated appliance standards called for by Governor Brown’s Executive Order 20-04 and under consideration by the Oregon Department of Energy (ODOE). Additionally, we encourage ODOE to expand the scope of these updates to include standards for additional appliances and equipment, which will lead to greater reductions in greenhouse gas emissions and savings for businesses and consumers.

E2 is a national, non-partisan group of business leaders, investors and others who advocate for smart policies that are good for the economy and good for the environment. Our members have been involved in the financing, founding or development of more than 2,500 companies that have created more than 600,000 jobs, and manage more than \$100 billion in venture and private equity capital.

Our E2 Pacific Northwest chapter was founded in 2009 and now includes Oregon-based businesspeople across a wide range of industries – from ranching, forestry, and real estate to renewable energy, energy efficiency, biofuels, and beyond.

Appliance efficiency standards are an important step in Oregon’s journey towards a clean energy economy and low-carbon future. E2 members—leaders in Oregon’s business community—have deep experience in industries that have seen economic growth fostered by smart public policy, and our members understand that well-designed appliance standards like those proposed by ODOE are a clear win for Oregon’s economy and environment.

According to an analysis by the Appliance Standards Awareness Project (ASAP), the standards proposed by ODOE will save Oregon consumers and businesses more than \$40 million annually by 2025 and nearly \$120 million annually by 2035, adding up to over \$720 million in aggregate savings through 2035. Additionally, the efficient appliances covered by these updated standards offer an average payback period of less than 18 months. All told, the savings offered by these standards will provide Oregonians with more money that will drive consumer spending and will allow businesses to invest more resources into growing their company, generating additional economic activity and benefits to the Oregon economy as a whole.

**Environmental Entrepreneurs • [www.e2.org](http://www.e2.org) • [facebook.com/e2.org](https://facebook.com/e2.org) • [@e2org](https://twitter.com/e2org)**

Mid-Atlantic • Midwest • New England • New York • Northern California • Pacific Northwest • Rocky Mountains • San Diego • Los Angeles

According to that same ASAP analysis, these updated standards will cut Oregon's carbon emissions by over 1.6 million metric tons by 2035, as well as drive substantial reductions in harmful nitrogen oxides and sulfur dioxide pollution. Reductions in carbon emissions and other harmful pollution are critical steps Oregon must take to cultivate and sustain a prosperous and healthy economy for the long term.

As a network of Oregon business leaders who recognize the economywide benefits that come with investment and adoption of energy efficiency technology, E2 strongly encourages ODOE to move forward with adoption of these standards and to consider adopting standards for additional appliances and equipment—including commercial ovens, electric vehicle supply equipment, and more—to achieve still greater bill savings for Oregon businesses and consumers and achieve further pollution emission reductions. In addition, E2 recommends ODOE to add regulatory language that grants it the authority to update existing standards to streamline the standards process and bring the Department's appliance standards authority in line with regulating agencies in several other states.

Thank you for the opportunity to provide written comments on these important standards. For more information, please contact me at [zamittay@e2.org](mailto:zamittay@e2.org).

Sincerely,

A handwritten signature in black ink, appearing to read 'Zach Amittay', with a long horizontal flourish extending to the right.

Zach Amittay  
E2 Advocate

June 24<sup>th</sup>, 2020  
Via Electronic Mail



Ms. Wendy Simons and Mr. Blake Shelide  
Oregon Department of Energy  
550 Capitol St. NE, 1st Floor  
Salem, OR 97301

RE: Oregon Department of Energy 2020 Energy Efficiency Standards Rulemaking

Dear Ms. Simons and Mr. Shelide,

Thank you for the opportunity to review the draft rules<sup>1</sup> and provide comments to the Oregon Department of Energy (ODOE) regarding the Energy Efficiency Standards for Appliances and Equipment Rulemaking.

Northwest Energy Efficiency Alliance (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 would like to commend ODOE for driving the adoption of appliance and equipment energy conservation standards in Oregon. Energy conservation standards (ECS) are a long-standing method for decreasing energy consumption in the region and energy costs for consumers. With few federal ECS established in the past 3 years, state-level involvement is more important now than ever before and we appreciate the time and effort ODOE has given to furthering energy efficiency in Oregon to reduce greenhouse gas emissions in line with the Governor's Executive Order 20-04. NEEA's analysis shows that by the year 2025 the proposed rules would amount to over 230 gigawatt-hours of electricity savings and 400 billion BTUs of gas savings. Combined, the total energy savings from the draft rules are poised to eliminate over 78,000 metric tons of CO<sub>2</sub> from our air and save consumers over \$40 million utility bills annually by 2025.

NEEA provides following supporting comments and data for several products listed in ODOE's proposed rule.

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<sup>1</sup> <https://www.oregon.gov/energy/Get-Involved/Pages/EE-Standards-Rulemaking.aspx>

## **High Color Rendering Index (High-CRI) Fluorescent Lamps**

NEEA supports ODOE's proposed rule on high-CRI fluorescent lamps, which contemplates standards for federally exempted linear fluorescent lamps, particularly high color rendering index (high-CRI) lamps. In addition to this comment letter, NEEA also submits the regional sales data of fluorescent lamps including Oregon. The data in Excel Spreadsheet format is submitted as a separate file for the record (Appendix A). We have collected the data through NEEA's Reduced Wattage Lamp Replacement (RWLR) initiative program.

The data suggests that these lamps are increasingly being marketed as an alternative to federally regulated lamps of the same type. In other words, the lack of standards for high-CRI lamps is a growing loophole in the federal regulatory framework for such products. To our knowledge, as recently as three years ago no high-CRI T8 fluorescent lamps were available. Now they have a growing share of the overall T8 market. These products are approximately 14 percent less efficient than the federal standard requires for other T8 lamps. Use of the high-CRI loophole is also extending the market significantly for T12 lamps. As one can see in the data, one reason for this market situation is likely the notably lower prices for the high-CRI products, compared to those for the federally regulated products.

The data submitted are from Northwest sales data, from distributors representing approximately 45 percent of the Maintenance, Repair & Operations (MRO) and larger electrical/lighting distributor market for these lamp types. Our data does not cover smaller MRO distributors, on-line sales, or do-it-yourself (DIY) retail (such as Home Depot or Loew's), where the sales of the less expensive high-CRI lamps may be a larger fraction of total linear fluorescent sales.

### Key findings from our analysis include:

1. Using fluorescent T8s and T12s as the total market, high-CRI T12s represented 6.4 percent of the total market in 2017, while high-CRI 32W T8 represented 2.8 percent in 2017.
2. Although prices have risen, the market share of T12 lamps (both high- and low-CRI) has remained reasonably consistent over time, suggesting that the market is "sticky" or not sensitive to changes in price or other market effects. This could suggest that federal regulation might be one of the only ways to move consumers away from this product.
3. Prices have also risen for high-CRI 32W lamps, but the RWLR pricing data show that these products are priced lower on average than 25W, 28W, 32W lamps with CRI below 87 (which must comply with federal standards regulations).

We note that data from other parts of the country may show higher market shares for the high-CRI products, in part because of the success of NEEA's reduced-wattage lamp program, which has significantly affected the T8 lamp market. The program contractor has confirmed that the sales of 25W and 28W T8 lamps are significantly higher in the Pacific Northwest compared to

most of the rest of the country, which suggests that the market share of other T8 lamps and T12 lamps (including the high-CRI models) would be larger in many areas outside the Northwest. Recent market intelligence in the distribution channels with which we partner suggests that much cheaper (approaching \$1 per lamp) high-CRI T8 lamps may soon be on the market, worsening the degree to which the savings from the latest federal lamp standards are being undermined. The proposed standards in the draft rule are equivalent to those for the federally regulated products. We commend ODOE to propose this rule and close the loophole by adopting state standards for high CRI fluorescent tubes.

### **Computers and Monitors**

NEEA supports ODOE's proposed rule to align with California's standards on computer and monitors. This proposed standard will provide Oregon consumers energy savings in a cost-effective way. We have heard oral testimony on July 23, 2020 from the trade association that setting Oregon's computer and monitor standard levels to align with California's standards will not yield any savings for Oregonians because all computers and monitors are sold in the US at these efficiency levels. The fact is that there are both ENERGY STAR and non-ENERGY STAR computers and monitors sold in the U.S., indicating there are products sold at different efficient levels. We have suggested the trade association to provide the nation sales data based upon efficiency level to the Oregon Department of Energy under a nondisclosure agreement. In the absence of data to prove this claim, we support ODOE adopt higher standards to align with California for computers and monitors in Oregon.

### **Electric Storage Water Heaters**

NEEA supports ODOE's proposal to align with the Washington State regulation on connected electric storage water heaters. In the oral testimony on July 23, 2020, manufacturers and trade association expressed their support of water heater with demand response enabled feature as proposed in this rule for the inclusion of the CTA-2045 port. NEEA has a long history to advance the heat pump water heater technologies and implement the market transformation interventions. NEEA focuses on water heater efficiency and grid connectivity. NEEA has worked closely with industry and utilities to develop an *Advanced Water Heater Specification*<sup>2</sup> that provides the technical foundation and details to implement this regulation. NEEA's specification provides definitions and requirements for the integration of the demand response enabled technologies in electric water heating equipment and the communication port that operates in compliance with CTA-2045 (or equivalent open source modular interface standard). Demand response enabled features enable water heaters to be used as thermal batteries or tools to shift load to provide additional value to the utilities and the electric grid, further reducing greenhouse gas emissions in Oregon. We appreciate the work ODOE has done in developing Oregon state standards for electric storage water heaters.

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<sup>2</sup> <https://neea.org/resources/advanced-water-heating-specification>

### **Residential Ventilating Fans**

We support the proposed standards for residential ventilating fans. These standards offer cost-effective savings and align with the market in providing efficient bathroom and utility fans commonly used in residential buildings. The efficient fans not only provide energy savings but offer other co-benefits such as improved indoor air quality.

### **Commercial Fryers, Dishwashers and Steam Cookers**

We support ODOE's proposed rule for alignment with the ENERGY STAR v2.0 specification for commercial fryers and dishwashers, and v1.2 for commercial steam cookers. On average these cooking appliances last for 12 to 13 years and therefore are important appliances to target for Oregon's standards. These cooking appliances are featured in almost every commercial kitchen and due to a low incremental cost compared to market average equipment they have been shown to be a highly cost-effective option for commercial kitchens. ENERGY STAR shipment data for these products indicate high market penetration already, making them a market-ready solution for businesses. A restaurant owner replacing three products with those meeting the proposed standard efficiency level could save about \$4,500 per year on electricity, gas, and water bills, making this a smart investment for businesses and for Oregon to include in the standards rulemaking. We commend ODOE for aligning with neighboring states on these specifications to prevent Oregon from becoming a place where inefficient kitchen equipment resides and look forward to ODOE continually updating commercial kitchen equipment specifications as they become further adopted throughout the west coast.

NEEA understands the approach taken by ODOE in developing state standards that are in line with neighboring states and jurisdictions to create a more wholly aligned market. While NEEA supports the draft rules proposed by ODOE to help drive energy conservation and reduce greenhouse gas emissions in Oregon, we also look forward to ODOE's continuing commitment to develop additional appliance standards in the future including but not limited to commercial ovens, residential gas fire places and general service light bulbs. Though neighboring states have not yet updated or adopted standards for commercial ovens, residential gas hearths, or more aggressive water conservation standards, we see Oregon positioned to become a leader through ODOE's guidance in bringing new products forward for consideration. We attach the comment letter NEEA submitted to ODOE on June 19, 2020 for the record (Appendix B). NEEA's June 19 Letter provides technical data and supporting document on additional products for ODOE to regulate in future. Irrespective of the timing of state legislative sessions, ODOE's willingness to update state standards with more recent and relevant specifications as well as incorporating additional products will save even more energy for Oregon ratepayers.

Thank you for your consideration and support of reducing Oregon's greenhouse gas emissions through thoughtful and practical appliance and equipment standards. We look forward to continuing the conversation with ODOE and regional stakeholders on additional appliance



standards in the future.

Sincerely,

A handwritten signature in black ink, appearing to be 'Bing Liu', written in a cursive style.

Bing Liu, P.E.  
Sr. Manager, Codes | Standards | New Construction  
NORTHWEST ENERGY EFFICIENCY ALLIANCE  
421 SW Sixth Avenue, Suite 600, Portland, Oregon 97204  
503.688.5400 | Fax 503.688.5447 | neea.org

# Appendix A

## Regional Sales Data of Fluorescent Lamps



Microsoft Excel  
Macro-Enabled Wor

## **Appendix B**

### **NEEA's Comment Letter Submitted to ODOE on June 19, 2020**

June 19<sup>th</sup>, 2020  
Via Electronic Mail



Mr. Blake Shelide  
Oregon Department of Energy  
550 Capitol St. NE, 1st Floor  
Salem, OR 97301

RE: Oregon Department of Energy 2020 Energy Efficiency Standards Rulemaking

Dear Mr. Shelide,

Thank you for the opportunity to provide comments for the Oregon Department of Energy's proposed Energy Efficiency Standards for Appliances and Equipment Rulemaking.

Northwest Energy Efficiency Alliance (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 supports the efficiency standards proposed by ODOE at the May 20th Advisory Meeting. NEEA has reviewed the Oregon Department of Energy's (ODOE) 2020 proposed minimum energy efficiency standards for state-regulated appliance and equipment.

NEEA recommend ODOE to consider adopting additional appliance and equipment standards, gaining greater energy savings, strengthening Oregon's commitment to reducing greenhouse gas emissions through appliance standards efficiency improvement as per the Executive Order 20-04. The additional products we recommend include Commercial Ovens and Residential Gas Fireplaces. NEEA provides technical data and supporting documentation for ODOE's consideration below.

**1. We recommend that ODOE include Commercial Ovens in the state-regulated standards.**

ODOE's proposed state-regulated appliance and equipment includes commercial fryers, dishwashers, and steam cookers as part of the proposed rulemaking. These standards are intended to align with ENERGY STAR standards and test procedures that are already in place. In

addition to these appliances, we recommend that ODOE consider adding Commercial Ovens, in line with ENERGYSTAR specification version 2.2.

Commercial ovens have been included in the suite of commercial foodservice equipment for over a decade. ENERGYSTAR collects shipment data and conducts extensive stakeholder engagement to update specifications over time in step with moving the market forward in terms of efficiency. In 2018, 60% of all commercial ovens shipped were ENERGYSTAR version 2.2 qualified, indicating that the market has significant support for this level of efficiency.

As with other ENERGYSTAR rated foodservice appliances, the specification primarily focuses on improving the cooking efficiency of the appliance and reducing the idle power draw. Because most food service equipment sits idle during a typical day, reducing the idle consumption rate can save a significant amount of energy and commercial kitchens can realize fast paybacks compared to other efficiency improvements. Today, food preparation equipment accounts for almost 35% of the total energy used in a facility.

The current specification, version 2.2, which took effect in 2015 requires that commercial ovens meet a minimum cooking efficiency requirement and a maximum idle (or standby) energy rate. Convection ovens meeting ENERGYSTAR Version 2.2 consume about 15% less energy than standard models. For the average size restaurant in Oregon, a single ENERGYSTAR qualified combination oven can save over 5,000 kWh/yr or 1,100 therms/yr depending on the appliance fuel, saving over 1% of total building load and realizing a payback of 3 years or less.

We recommend including ovens as part of Oregon's appliance standards due to 3 primary factors:

1. Ovens are utilized in almost every commercial kitchen and spend a significant amount of time idling.
2. Ovens are currently included as a requirement for additional efficiency packages in both the 2021 International Energy Efficiency Code (IECC) and the 2018 Washington State Energy Code (WSEC). Both codes align the oven requirements with ENERGY STAR version 2.2 levels.
3. Shipment levels from ENERGY STAR indicate the commercial oven market is supportive of this level of efficiency and an appliance standard will assist in capturing areas of the market where utility programs and codes have difficulty gaining traction.

## **2. We recommend ODOE include Residential Vented Gas Fireplaces in line with established standards.**

The proposed Oregon Equipment standards do not currently include any residential heating equipment. While gas furnaces and heat pumps have historically been regulated at the federal level, there are no federal regulations related to gas fireplaces which make-up a large market share in Oregon, especially in new homes. Therefore, we recommend including an established

standard for gas fireplaces (including both vented gas heaters and vented decorative gas appliances) that prohibits standing pilot lights and requires all fireplaces be listed and labeled with a Fireplace Efficiency (FE) rating based on the CSA P.4.1-15 standard. Furthermore, we recommend ODOE require a minimum 50% FE rating for vented gas heaters (decorative fireplaces do not have a minimum FE threshold).

This proposed standard would mirror the [2018 British Columbia regulations](#)<sup>3</sup> in terms of standard requirements, test procedure, certification, listing, and labeling for vented gas fireplace heaters and decorative gas appliances. That standard requires that all fireplaces manufactured on or after January 1, 2020 be listed and labeled with an FE rating<sup>4</sup> in accordance with CSA P.4.1-15. In addition, vented gas fireplace heaters are required to achieve a FE rating of 50% or greater when tested to this standard. If Oregon adopted this standard it would align with the 2018 Washington State Energy Code (WSEC) mandatory requirement, the 2018 British Columbia Standards Regulation, and the pilot light prohibition in the upcoming 2021 IECC.<sup>5</sup>

There are two factors for energy savings: 1) the prohibition of a standing pilot light, and 2) the minimum efficiency of the fireplace.

### **Pilot Light Prohibition Component**

Standing pilot lights have been eliminated from most gas heated appliances and are covered by federal standards. However, there are no standards for gas fireplaces and standing pilot lights still appear on many products in the market. As fireplaces are used for only a portion of the year, a standing pilot has been found to sit idle for over 3,700 hours/yr without any benefit to heating the home. The hearth industry has moved beyond standing pilot lights and has a policy statement reflecting this on the Hearth, Patio, and BBQ Association (HPBA) [website](#). The HPBA serves as the voice of the gas hearth industry and acknowledges that pilot lights are unnecessary given advances in ignition technology.

### **Minimum FE rating for Vented Gas Heaters**

The minimum FE requirement on vented gas heaters was a collaborative agreement between the BC Ministry of Energy, Mines, and Petroleum Resources and the HPBA during the formation of the 2018 regulations. The HPBA agreed to a minimum FE rating for vented gas fireplace heaters, so long as decorative gas appliances were exempt. Analysis developed as part of the WSEC code development cycle found that the vast majority of fireplaces available in the market today exceeded the 50% FE rating, indicating that this level is well supported by the market already.

Total savings from prohibiting pilot lights and requiring a minimum 50% FE threshold for

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<sup>3</sup> [http://www.bclaws.ca/civix/document/id/complete/statreg/14\\_2015#section33](http://www.bclaws.ca/civix/document/id/complete/statreg/14_2015#section33)

<sup>4</sup> Natural Resources Canada (NRCAN) maintains a public database of FE ratings for fireplaces that can be used to demonstrate compliance and the certification listing.

<sup>5</sup> The IECC only prohibits standing pilot lights on gas fireplaces but does not impose a minimum FE rating.

vented gas fireplace heaters was estimated to be 28 therms/yr of gas savings, at an incremental cost of only \$105 for the fireplace. The payback for adopting this would be under 4 years given current residential gas prices in Oregon.

Aligning with the BC regulation and WSEC would also allow consistency between markets up and down the west coast<sup>6</sup>. This would allow the industry to adhere to a single standard, keeping supply chain logistics simple and creating a unified market for efficient fireplaces throughout the Northwest region.

In summary, the following table lists our proposed additional products that we recommend ODOE to consider establishing energy efficiency standards. We also include the supporting documentation for inclusion in the Oregon Equipment Standards.

**Proposed Standard, Test Procedure, Certification, and Labeling requirements.**

<b>Oregon Equipment Standards Summary, 2020 Rulemaking Draft</b>					
<b>Equipment</b>	<b>Standard</b>	<b>Test Procedure</b>	<b>Certification/ Listing</b>	<b>Labeling/ Marking</b>	<b>Effective Date</b>
Commercial Ovens	ENERGY STAR v2.2	ENERGY STAR v2.2	ENERGY STAR®	ENERGY STAR®	1/1/2023
Gas Hearths	CSA P.4-15	CSA P.4-15	EnergyGuide Label	EnergyGuide Label	1/1/2023

Thank you for your consideration and support of reducing Oregon’s greenhouse gas emissions through thoughtful and practical appliance and equipment standards.

Sincerely,

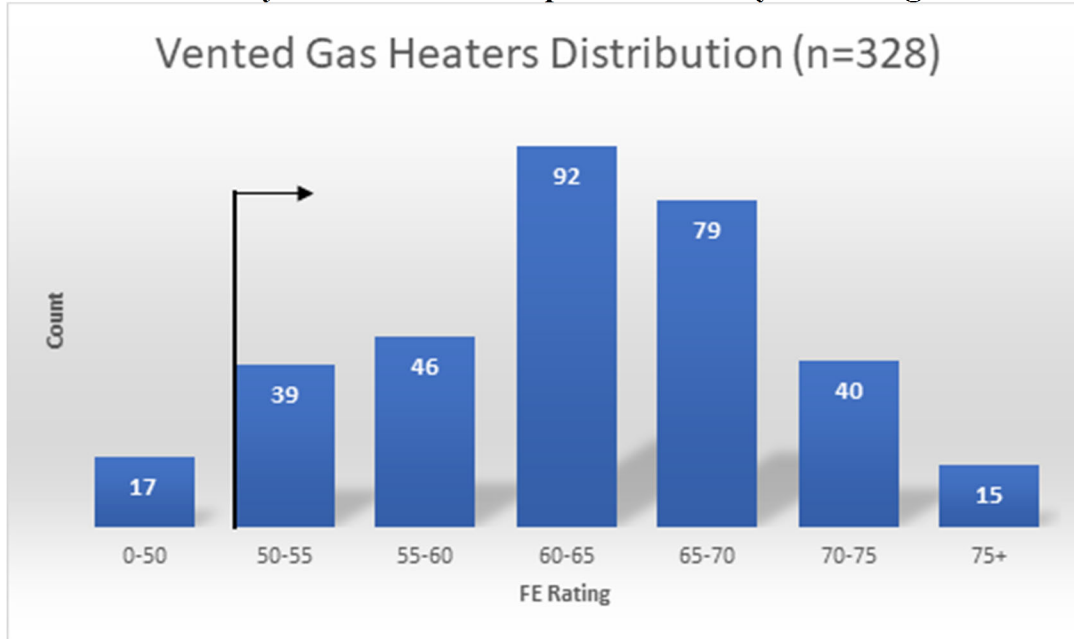


Bing Liu, P.E.  
 Sr. Manager, Codes | Standards | New Construction  
 Northwest Energy Efficiency Alliance  
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<sup>6</sup> California is currently considering a similar standard however the rulemaking is not final at this time.

## Supporting Documentation

### Market Availability of Vented Gas Fireplace Heaters by FE Rating



### HPBA Position Statement on Standing Pilot Light Elimination

Position Statement: New technologies now exist that can more adequately replace continuous pilots, which provided an important safety feature, but have required consumers to manually extinguish the pilot on their gas appliances. A phasing out of continuous pilots saves homeowners money and achieves energy conservation when appliances are not in frequent use.

Issue Summary: HPBA has been advancing a revision to the applicable standards for vented gas fireplaces, stoves, and inserts that would disallow continuous pilots at some point in the future. With this phase out, industry is able to contribute to energy conservation goals, while considering the unique attributes, functions, and technical considerations of each appliance category. The CSA Group, setting technical appliance standards worldwide, has accepted HPBA's request for change to phase out continuous pilot lights, sometimes referred to as "standing" pilots, by 2022-2023.

The standards are being revised independent of federal regulatory efforts and will disallow continuous pilots on newly manufactured products currently covered under the ANSI Z21.50 and Z21.88 standards. The target effective date was identified with the acknowledgement that it may take time to perfect some control technologies that will be used in replacing continuous pilots. Vented gas appliances have been lightly regulated in Canada for many years (test-and-disclose provision of P.4.1), but multiple regulatory agencies are considering additional regulation on a



wide range of gas-fired appliances, including labeling provisions, minimum efficiencies, and bans on continuous pilots.



National Electrical Manufacturers Association

The association of electrical equipment  
and medical imaging manufacturers  
[www.nema.org](http://www.nema.org)

July 24, 2020

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

**Re: NEMA Comments on the Draft Appliance Energy Efficiency Standards Rules**

The National Electrical Manufacturers Association (NEMA), the leading trade association representing manufacturers of electrical and medical imaging equipment, provides the attached comments to the Oregon Department of Energy (ODOE) on the Draft Appliance Energy Efficiency Standards Rules.

NEMA represents more than 325 electrical equipment and medical imaging manufacturers that make safe, reliable, and efficient products and systems across 56 product sections. Our combined industries account for over 370,000 American jobs in more than 6,100 facilities covering every state. Our industry produces \$124 billion shipments of electrical equipment and medical imaging technologies per year with \$42 billion exported. In Oregon, 11 of our Member companies maintain 21 facilities employing nearly 1,000 people.

NEMA opposes the inclusion of High Color Rendering Index (CRI) florescent lamps in the draft rules. The Standards set in the draft rules would have the effect of banning the sale of High CRI T12 fluorescent lamps in Oregon. These lamps have a specific phosphor mix which is needed to produce light across the entire color spectrum. This phosphor mix reduces lumen output and High CRI T12 fluorescent lamps cannot meet the Standard in the draft rules. These four-foot fluorescent tube lamps have typically been used in residential applications, usually in “shoplite” fixtures operated with low power ballasts. If these lamps cannot be sold in Oregon, residents will have no suitable replacements for their fixtures. Neither T8 fluorescent lamps nor linear LEDs (TLEDs) will work in the High CRI T12 fixtures due to the specific ballast that accommodates the High CRI T12s. Residents who have these fixtures will be forced to replace their entire set of current fixtures if they need replacement lamps, incurring additional costs – first for the new fixture and, in many cases, for the cost of an electrician to install it. The replacement costs to the consumer will exceed the energy savings benefit.

Second, even though High CRI fluorescent lamps are not included in California Energy Commission (CEC) Title 20 regulation at present, ODOE draft rules reference CEC regulation for marking and reporting. Indeed, there is no timeline to incorporate High CRI lamps into CEC regulation. ODOE draft rules, by referencing an unpublished regulation, presents problems in the review process as the public cannot effectively provide comment on a referenced regulation that has not been finalized.

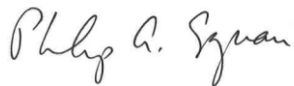
Third, the potential energy savings from banning High CRI T12 lamps claimed by advocacy groups are greatly overstated. NEMA conducted a study on potential energy savings and found that if the lamps are banned in 2023, as proposed in the rule, only 0.8 billion kWh of electricity could be saved nationally. This

is significantly less than the *States Go First*<sup>1</sup> report from the Appliance Standards Awareness Project (ASAP) which claims 130 billion kWh of electricity could be saved and is referenced by ODOE in the 2018 memorandum on Improved State Standards for Appliances. This calls into question the rationale provided by ODOE that a consumer's savings on utility bills will outweigh the costs of replacing equipment. NEMA would welcome the opportunity to discuss our energy savings findings with the Department.

Overall, the draft rule will create a burdensome and costly imposition on Oregon residents and businesses who simply need to replace a light bulb. Furthermore, the greatly diminishing sales of High CRI fluorescent lamps, as the market naturally gravitates towards LEDs, means there is an increasingly smaller installed base and therefore lower savings if High CRI fluorescent lamps are banned.

If you have any questions or need more information, please contact Madeleine Bugel at 703-841-3222 or [Madeleine.Bugel@nema.org](mailto:Madeleine.Bugel@nema.org).

Sincerely,



Philip A. Squair  
Vice President, Government Relations

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<sup>1</sup> <http://appliance-standards.org/sites/default/files/States%20Go%20First.pdf>



July 24, 2020

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

[Via email]

RE: Oregon Department of Energy (ODOE) 2020 Energy Efficiency  
Standards Rulemaking

Dear Ms. Simons and Mr. Shelide,

On behalf of the Natural Resources Defense Council, a leading environmental advocacy organization, and its more than 2 million members and activists, including nearly 14,700 Oregon residents, we offer our strong support for the new and updated appliance standards proposed by ODOE. In addition, we urge Oregon to consider expanding the scope to include additional appliances and equipment, which will generate even more savings for consumers, businesses, and the environment.

### **Standards Under Consideration**

We are supportive of the appliance standards proposed by ODOE for high color rendering index (high CRI) fluorescent lamps, computers and computer monitors, faucets and showerheads, commercial fryers, dishwashers, and steam cookers, residential ventilating fans, and portable electric spas. We also support the demand response design requirement for electric storage water heaters. According to estimates by the Appliance Standards Awareness Project (ASAP), the efficiency standards proposed for these products will save Oregonians 230 gigawatt-hours of electricity and \$40 million on their bills annually by 2025. These standards will also avoid the emission of 80,000 metric tons of carbon dioxide annually by the same

year, helping the state to achieve the goals set by the Oregon Climate Action Plan.

These standards are all cost-effective, saving Oregonians money on their bills that can help to pay off the costs of these products. According to ASAP, the standards for commercial fryers, dishwashers, and steam cookers would save restaurant owners around \$3,200 in annual energy and water bills, paying for themselves in about one year of use, and save a total of around \$40,000 over their 12-13 year lifetime. In addition, the proposed updates for high CRI fluorescent lamps phasing out the least efficient T12 bulbs on the market for LED tubes and T8 fluorescent tube lamps presents annual electricity bill savings of up to \$170 for consumers and \$140 for businesses, paying for themselves in under 3 years of use.

### **Additional Standards to Consider**

We urge Oregon to consider an expanded scope of products covered by state standards, or put in place a plan to do so in the near future. ODOE should consider standards for air purifiers, commercial ovens and hot food holding cabinets, electric vehicle supply equipment, general service light bulbs, and toilets, urinals, and spray sprinkler bodies. We understand Oregon's desire to align with nearby states, but the potential savings for Oregon's consumers from an expanded standards scope is significant. ASAP analysis demonstrates that these additional standards would save more than \$42 million in annual savings by 2025 – and many have an immediate payback period, meaning it is no more expensive for a consumer to purchase a more efficient version.

The time is ripe for Oregon to implement these standards. Consumers are more interested than ever in purchasing air purifiers, yet only about 35% of products on the market meet ASAP's energy efficiency recommendation based on ENERGY STAR standards, even though there is no increased cost for efficient models. If Oregon implements the proposed standards for Electric Vehicle Supply Equipment, it can help to meet the state's Zero

Energy Vehicle goals and reduce the amount of energy used by charging infrastructure. All of these standards present cost-savings, preserve consumer choice, and help Oregon to reduce energy consumption and greenhouse gas emissions to help meet the goals of its Climate Action Plan.

ODOE notes that it is not pursuing standards for toilets, urinals, or spray sprinkler bodies at this time because they are primarily water-saving standards. These standards have an enormous impact on consumers: ASAP estimates annual utility bill savings of \$118 million by 2035, for spray sprinklers alone. Saving water saves energy: water that isn't used does not have to be treated or pumped, which conserves enormous amounts of energy. Nationwide, water treatment and pumping is responsible for about 3.5 percent of total U.S. energy consumption. Furthermore, according to the U.S. Drought Monitor, [90 percent of the state of Oregon is in a drought](#), with nearly half of the state in a drought that's classified as "severe" or "extreme." Water-saving standards are not just nice to have, they are essential to preserve limited water resources. California and Washington have standards in place for these products, so adopting such a standard would be consistent with neighboring states.

We also recommend ODOE add language through the regulatory process, granting the Department additional authority to update existing standards through a streamlined process. Such language would allow ODOE to update standards to newer established specifications (like ENERGY STAR or WaterSense), or to align with neighboring states as standards are updated. This is a sensible way to ensure state standards remain relevant as other specifications evolve.

We encourage you to support this rulemaking and to expand the scope, particularly to include water-saving products.

Sincerely,



Lauren Urbanek  
 Senior Energy Policy Advocate  
 Climate and Clean Energy Program

	Potential annual utility bill savings (million 2018\$)		Net present value savings (million 2018\$)	Benefit-cost ratio	Payback period (years)
	In 2025	In 2035			
Air compressors	0.1	0.3	1.0	1.8	5.3
Air purifiers	3.3	9.8	68.2	no cost	0.0
Commercial dishwashers	1.5	6.9	39.7	9.8	1.2
Commercial fryers	1.4	6.3	26.5	2.9	4.0
Commercial hot-food holding cabinets	0.2	0.7	0.8	1.2	7.6
Commercial ovens	0.2	0.8	4.6	6.9	1.5
Commercial steam cookers	1.0	3.8	22.5	10.1	1.0
Computers and computer monitors	7.1	12.2	32.8	1.6	3.3
Electric vehicle supply equipment	0.1	1.9	13.1	no cost	0.0
Faucets	14.9	49.0	335.0	no cost	0.0
High CRI fluorescent lamps	2.0	0.9	9.4	2.5	2.8
Portable air conditioners	1.0	3.4	13.9	2.5	3.8
Portable electric spas	2.7	7.4	43.8	7.0	1.1
Residential ventilating fans	0.1	0.2	1.3	no cost	0.0
Showerheads	9.1	30.3	207.1	no cost	0.0
Spray sprinkler bodies	35.9	118.0	736.8	11.2	0.8
Toilets (water closets)	2.0	8.5	76.4	no cost	0.0
Uninterruptible power supplies	1.4	2.6	8.4	1.7	3.1
Urinals	0.3	1.1	7.4	no cost	0.0
Water coolers	0.3	0.8	5.4	no cost	0.0
<b>Total</b>	<b>85</b>	<b>265</b>	<b>1,654</b>	<b>9.6</b>	<b>-</b>

Assuming a compliance date of 2022 for all the recommended standards. Net present value savings take into account both utility bill savings and estimated impacts on product costs for items sold between 2022 and 2035. Totals may not sum due to rounding. The total benefit-cost ratio is calculated as the present value of the total utility bill savings from products sold through 2035 for the package of recommended standards divided by the present value of the total additional costs.

Affiliated Tribes of Northwest Indians  
AirWorks, Inc.  
Alaska Housing Finance Corporation  
Alliance to Save Energy  
Allumia  
Alternative Energy Resources Organization  
American Rivers  
Backbone Campaign  
Beneficial State Bank  
BFA Energy  
BlueGreen Alliance  
Bonneville Environmental Foundation  
Byrd Barr Place  
City of Ashland  
City of Seattle Office of Sustainability & Environment  
CleanTech Alliance  
Climate Smart Missoula  
Climate Solutions  
Coffman Engineers  
Community Action Center of Whitman County  
Community Action Partnership Assoc. of Idaho  
Community Action Partnership of Oregon  
Community Energy Project  
Counterbalance Capital  
Earth Ministry  
Ecumenical Ministries of Oregon  
eFormative Options  
Elevate Energy  
Energy350  
Energy Trust of Oregon  
Environment Oregon  
Environment Washington  
Forth  
Global Ocean Health  
Green Energy Institute at Lewis & Clark Law School  
Grid Forward  
Homes for Good  
Home Performance Guild of Oregon  
Human Resources Council, District XI  
Idaho Clean Energy Association  
Idaho Conservation League  
Idaho Rivers United  
League of Women Voters Idaho  
League of Women Voters Oregon  
League of Women Voters Washington  
Montana Audubon  
Montana Environmental Information Center  
Montana Renewable Energy Association  
Multnomah County Office of Sustainability  
National Center for Appropriate Technology  
National Grid  
Natural Resources Defense Council  
New Buildings Institute  
Northern Plains Resource Council  
Northwest EcoBuilding Guild  
Northwest Energy Efficiency Council  
NW Natural  
OneEnergy Renewables  
Opportunities Industrialization Center of WA  
Opportunity Council  
Oracle/Opower  
Oregon Citizens' Utility Board  
Oregon Energy Fund  
Oregon Environmental Council  
Oregon Physicians for Social Responsibility  
Oregon Solar Energy Industries Association  
Pacific Energy Innovation Association  
Pacific NW Regional Council of Carpenters  
Portland Energy Conservation, Inc.  
Portland General Electric  
Puget Sound Advocates for Retirement Action  
Puget Sound Cooperative Credit Union  
Renewable Hydrogen Alliance  
Renewable Northwest  
Save Our wild Salmon  
Seattle City Light  
Sierra Club  
Sierra Club, Idaho Chapter  
Sierra Club, Montana Chapter  
Sierra Club, Washington Chapter  
Small Business Utility Advocates  
Snake River Alliance  
Snohomish County PUD  
Solar Installers of Washington  
Solar Oregon  
Solar Washington  
South Central Community Action Partnership  
Southeastern Idaho Community Action Agency  
Spark Northwest  
Spokane Neighborhood Action Partners  
Sustainable Connections  
The Climate Trust  
The Energy Project  
Transition Missoula  
UCONS, LLC  
Union of Concerned Scientists  
United Steelworkers of America, District 12  
Washington Environmental Council  
Washington Physicians for Social Responsibility  
Washington State Community Action Partnership  
Washington State Department of Commerce  
Washington State University Energy Program  
YMCA Earth Service Corps  
Zero Waste Vashon



July 20, 2020  
VIA EMAIL

Ms. Wendy Simons and Mr. Blake Shelide  
Oregon Department of Energy  
550 Capitol St. NE, 1st Floor  
Salem, OR 97301

Dear Ms. Simons and Mr. Shelide,

We are grateful for the opportunity to comment on ODOE's draft rules for appliance energy efficiency standards. We reiterate that ODOE's work on updating these standards is one of the most cost-effective ways to save the state energy and money.

The Governor's Executive Order 20-04 (EO) encourages creativity and urgency in advancing the state's greenhouse gas reduction goals. As such, we are disappointed that ODOE and the EO expressed openness to advancing appliance standards not listed in the EO, but that ODOE has since expressed it will not be pursuing additional standards that are proven to save Oregonians money and energy.

Our work with low-income EE providers like Community Energy Project has made it clear how important updated EE standards are to communities who struggle the most with their energy bills, to ensure long-term savings and their access to the benefits of decarbonization. These appliances need to be accessible to the consumers who need them most. We encourage ODOE's close partnership with frontline-serving organizations to ensure equitable, accessible rollout of these standards and appliances.

Given these facts, we would encourage ODOE to address the following.

#### Products Not Listed in EO

- Commercial ovens, hot food holding cabinets, hearths: We understand ODOE's primary drive is to align with other west coast states in the standards they already have in place. Given the movement in all three west coast states with regard to these standards, and because ODOE's statutes requiring legislative approval slow its standards adoption process, we encourage ODOE to pursue updated standards for these products as soon as possible, to ensure less efficient appliances aren't dumped in Oregon.
- Toilets, urinals, spray sprinkler bodies: While ODOE has named its current scope "is for standards with a direct relationship to energy,"<sup>1</sup> we

<sup>1</sup> <https://www.oregon.gov/energy/Get-Involved/rulemakingdocs/2020-07-01-Appliance-Standards-Rulemaking-Summary.pdf>



encourage ODOE to consider the water-energy nexus as directly linked to energy and financial savings. Water affordability and shortages are increasingly a concern for residences and utilities<sup>2</sup>, and the importance of water-energy efficiency links in these products cannot be overstated. Energy embedded in water accounts for 3.5% of US annual electricity consumption. Moreover, neighboring states are making considerable headway with regard to these standards<sup>3</sup>.

- General service lighting (GSL): there are a number of light bulbs not preempted by federal standards, including several types of incandescent, decorated medium screw base, and incandescent reflector bulbs, as well as some reflector lamps. Standards for non-preempted light bulbs would align Oregon with standards in California, Washington, and three other states, and save significant energy and money. If ODOE will not act on this alignment now, the agency should act on GSL through a legislative concept, such as was proposed in last session's SB 1530. Without action, less efficient and more expensive bulbs will be dumped in Oregon.
- Electric vehicle supply equipment (EVSE): While there is no current state standard for EVSE, also referred to as EV chargers, EV adoption is ramping up in the state and EO 17-21, EO 20-04, SB 1547, and SB 1044 clearly direct Oregon to continue accelerating zero emission vehicle adoption. We agree with the Appliance Standards Awareness Project's (ASAP) pre-draft rules comments that Oregon should consider ENERGY STAR Version 1.0 standards for Level 1, Level 2, and combined chargers.

Lastly, we are supportive of the standards ODOE posted as of 7/1 in its [standards summary table](#), regarding the products that were listed in the EO. In our comments we submitted in mid-June, we enumerated some of the benefits these standards could bring to Oregon.

Thank you for your consideration and significant work in advancing these standards.

Sincerely,



Heather Moline  
Policy Associate  
NW Energy Coalition  
[heather@nwenergy.org](mailto:heather@nwenergy.org)

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<sup>2</sup> [https://amp.theguardian.com/us-news/2020/jun/23/millions-of-americans-cant-afford-water-bills-rise?\\_twitter\\_impression=true&fbclid=IwAR2x53KQ15pIT0\\_2eJPLVP5gY7f5BYSeJ0h9KwntHulZyagVIhLQI0Yn-Q4](https://amp.theguardian.com/us-news/2020/jun/23/millions-of-americans-cant-afford-water-bills-rise?_twitter_impression=true&fbclid=IwAR2x53KQ15pIT0_2eJPLVP5gY7f5BYSeJ0h9KwntHulZyagVIhLQI0Yn-Q4)

<sup>3</sup> <https://appliance-standards.org/states>



July 24, 2020

Mr. Blake Shelide and Ms. Wendy Simons  
Oregon Department of Energy  
[blake.shelide@oregon.gov](mailto:blake.shelide@oregon.gov)  
[wendy.simons@oregon.gov](mailto:wendy.simons@oregon.gov)

Re: Comments on Oregon Department of Energy's Proposed Rulemaking relating to Electric Storage and Heat Pump Water Heaters

Dear Mr. Shelide and Ms. Simons,

These comments are submitted by the A. O. Smith Corporation ("A. O. Smith") in response to the proposed rulemaking published by the Oregon Department of Energy (ODOE) requiring CTA-2045 ports and the associated supporting infrastructure for electric storage water heaters.

A.O. Smith Corporation, 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 leading manufacturers of residential and commercial water heating equipment and boilers, as well as a manufacturer of water treatment and air purification products.

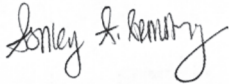
A. O. Smith is pleased to work with the ODOE in its rulemaking to address demand management functionality through the proposal of requirements to support the CTA-2045A hardware and application requirements for electric storage and heat pump water heaters. The rulemaking, once finalized, will assist manufacturers with product engineering and planning, as well as communicating to installers and the customers, how their electric storage water heaters and heat pump water heaters can provide additional grid benefits. A. O. Smith appreciates the opportunity to provide brief feedback for consideration by the ODOE on the proposed rulemaking and looks forward to collaborating through the rulemaking process.

A. O. Smith was pleased to see the requirements in the proposed rulemaking were harmonized with the recently adopted requirements adopted by the Washington Department of Commerce in its rulemaking implementing WA HB1444. It is of the utmost importance that States wanting to adopt demand response functionally be aligned such that the technical requirements be fully harmonized allowing manufacturers to offer products that will meet the regulatory requirements across state lines. Full harmonization helps manufacturers reach scale and reduce the development costs associated with maintaining State-specific SKUs. A. O. Smith supports the CTA-2045 port and application requirements

in the proposed rulemaking, without modification, including the January 1, 2022 implementation for both heat pump and electric storage water heaters and the label. A. O. Smith believes the proposed rulemaking represents full harmonization with the WA requirements. In addition, A. O. Smith was pleased to see that the process for ODOE to consider variations to the CTA-2045 port and application will seek the input of States with similar requirements. A. O. Smith urges ODOE to finalize the rulemaking requirements for electric storage and heat pump water heaters as proposed without further modification.

In conclusion, A. O. Smith appreciates the opportunity to provide brief comments to ODOE and supports the rulemaking to adopt fully harmonized CTA-2045 and supporting requirements for electric storage and heat pump water heaters in residences. A. O. Smith stands ready to work with the ODOE as it finalizes its rulemaking process.

Sincerely,

A handwritten signature in black ink that reads "Ashley A. Armstrong". The signature is written in a cursive, flowing style.

Ashley A. Armstrong  
Director, Regulatory and Technology Policy  
A. O. Smith Corporation  
400 North Capitol Street, NW Suite 585  
Washington, D.C. 20001  
[aaarmstrong@aosmith.com](mailto:aaarmstrong@aosmith.com)



July 17, 2020

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

**PMI 2020**  
**Board of**  
**Directors**

**RE: OREGON EXECUTIVE ORDER 20-04 - APPLIANCE ENERGY EFFICIENCY STANDARDS**

Joel Smith  
Kohler Co.  
President

Dear Mr. Shelide:

Todd Teter  
Moen Incorporated  
Vice President

Plumbing Manufacturers International (PMI) appreciates this opportunity to provide comments regarding Oregon Executive Order 20-04 that directs the Oregon Department of Energy (ODOE) to establish appliance energy efficiency standards for several products, including faucets and showerheads, that are modeled after Title 20 of California's Code of Regulations.

Martin Knieps  
Viega LLC  
Secretary-Treasurer

PMI is an international, U.S.-based trade association representing manufacturers that provide 90% of the plumbing products sold in the United States. PMI members manufacture water-efficient toilets, urinals, faucets, showerheads and other plumbing products at more than 70 locations across the country for the residential and commercial marketplace. These products are readily available at home improvement stores, hardware stores and showrooms in all 50 states, as well as online. **In Oregon, plumbing manufacturers contribute \$1 billion to the economy, provide more than 6,570 good paying jobs with their wholesale and retail partners, and generate \$344.6 million in wages.**

Nate Kogler  
Bradley Corporation  
Immediate Past  
President

Sal Gattone  
LIXIL

Daniel Gleiberman  
Sloan Valve  
Company

Regarding the proposed bill, PMI **opposes** the bill as currently drafted and would like to bring to your attention the following comments for your consideration:

Fernando Fernandez  
Toto USA

- The California Energy Commission is in the process of issuing a final report for a new study titled *"Code Changes and Implications of Residential Low Flow Hot Water Fixtures."* As a member of the Technical Advisory Committee for the research project, PMI would like to note the following observations:
  - **Reducing plumbing fixture fitting flow rates below U.S. EPA WaterSense® program levels without a corresponding reduction in pipe sizing does not save water in proportion to the change in flow rate.**
  - **There are unintended consequences to public health that can come from reducing flow rates without a corresponding reduction in pipe size.**
- Based on the November 2017 white paper titled *"Adapting to Change: Utility Systems and Declining Flows"*<sup>1</sup>, where issues with California's drinking water, wastewater and recycled-water infrastructures have been highlighted due to reductions in indoor water use, PMI believes that

<sup>1</sup> "Adapting to Change: Utility Systems and Declining Flows," California Association of Sanitation Agencies (CASA), Water Research Foundation (WRF), WaterReuse California, California Water Environment Association (CWEA) and California Water Urban Agencies (CUWA), November 2017, [http://www.cuwa.org/pubs/CUWA\\_DecliningFlowsWhitePaper\\_11-28-17.pdf](http://www.cuwa.org/pubs/CUWA_DecliningFlowsWhitePaper_11-28-17.pdf).

the State of Oregon should **first** analyze the impact on its infrastructures before lowering the water consumption levels of plumbing fixtures and fixture fittings below current state levels. **Without such an analysis, there could be possible risks to public health.**

- If ODOE decides to lower the water consumption levels of lavatory faucets and showerheads below current state levels for products that can be sold in the state, PMI believes that the agency should adopt maximum flow rates of 1.5 gpm for lavatory faucets (which includes lavatory faucets installed in residences and private restrooms in hotels and hospitals) and 2.0 gpm for showerheads that are consistent with the EPA WaterSense® program. Such requirements will not only ensure that lavatory faucets are 30% more water efficient and showerheads are 20% more water efficient than federal regulations (or what is currently permitted for sale in Oregon), but also that these products are required to meet high performance standards.
- PMI believes that for manufacturers, retailers and distributors to meet the new efficiency standards without incurring excessive costs or hardship, the requirements should apply to products sold beginning January 1, 2022, and the installation of such products should not be mandated until at least 6 months later in order to give retailers (including local hardware stores) and distributors sufficient time to sell through their existing inventory. Therefore, **PMI recommends revising** the text on page 9 of the proposed revisions to OAR 330-092 as follows:

*“(11) Faucets: The standards in OAR 330-092-0020(11) are effective for faucets that are manufactured on or after January 1, 2022, and subsequently sold; or offered for sale, and on June 1, 2022 for any faucet that is ~~or~~ installed in Oregon.”*

*“(12) Showerheads: The standards in OAR 330-092-0020(12) are effective for showerheads that are manufactured on or after January 1, 2022, and subsequently sold; or offered for sale, and on June 1, 2022 for any showerhead that is ~~or~~ installed in Oregon.”*

Thank you for considering our comments. If you have any questions regarding our comments, please do not hesitate to contact me.

Sincerely,



Matt Sigler  
Technical Director  
Plumbing Manufacturers International  
Office 847-217-7212  
[msigler@safep plumbing.org](mailto:msigler@safep plumbing.org)

**PMI Members**

\*Bradley Corporation \*CSA Group \*Delta Faucet Company \*Duravit USA  
\*Fisher Manufacturing Company \*Fluidmaster, Inc. \*Franke \*Global OEM \*Globe Union Group, Inc. \*Hansgrohe, Inc.  
\*Haws Corporation \*IAPMO \*International Code Council Evaluation Service \*KEROX \*Kohler Co \*Lavelle Industries, Inc. \*LIXIL \*Moen Incorporated  
\*NEOPERL, Inc. \*NSF International \*Pfister \*Reliance Worldwide Corporation \*Similor AG \*Sloan Valve Company \*Speakman Company \*Sprite  
\*Symmons Industries, Inc. \*T & S Brass and Bronze Works, Inc. \*TOTO USA \*UL LLC \*Viega LLC \*WaterPik \*WCM Industries, Inc



**Portland General Electric**  
121 SW Salmon Street • Portland, Ore. 97204

July 23, 2020

Oregon Department of Energy  
550 Capitol St NE, Salem, OR 97301  
E: [wendy.simons@oregon.gov](mailto:wendy.simons@oregon.gov)

Re: Support for Proposed Appliance Energy Efficiency Standards Rule Changes

Dear Oregon Department of Energy:

Portland General Electric (PGE) greatly appreciates the opportunity to convey our support for the proposed Appliance Energy Efficiency Standard rule changes. Specifically, we wanted to express the importance of the proposed standard for grid-connected water-heaters that use a communication port that is compliant with CTA-2045 or equivalent on all electric water heaters manufactured on or after January 1, 2022. Grid-connected devices that customers can voluntarily enroll into demand response programs are critical tools that will help achieve the greenhouse gas reduction targets set forth by Governor Brown's Executive Order 20-04 because they promote smarter energy use and support integrating variable renewable resources onto the electric system.

PGE set forth a goal in 2018 to reduce our greenhouse gas emissions by more than 80%. Foundational to achieving this goal is a modernized, flexible, and smart grid that is capable of efficiently integrating variable renewable resources while keeping the system reliable and affordable. Based on the Deep Decarbonization Study for our service territory, PGE could need 10 to 15 gigawatts of additional renewable and carbon-free resources between now and 2050 to reach our goals, which will require integrating and optimizing high volumes of distributed and utility-scale variable renewable resources.

Demand response and flexible loads, enabled by grid-connected appliances, are essential to maximizing renewable resources and support keeping the electric system reliable. They enable PGE, the grid operator, to use wind and solar resources when they are available, and to shift electricity demand when they are not through customer voluntary participation in demand response programs. Specifically, grid-connected water heaters present a particularly promising load for balancing and integration purposes. Adopting this appliance standard for water heaters will provide:

- Customers an easy, consistent approach to connect their water heater with demand response programs, regardless of the manufacturer;
- Utilities a cost-effective approach to implementing and operating demand response programs; and
- The necessary volume to lower the cost of the communication hardware.

Thank you again for the opportunity to comment on the draft rulemaking. PGE truly believes that the advancement and adoption of demand response at the residential level is a major component of a decarbonized future.

Sincerely,

A handwritten signature in black ink, appearing to read "Sunny Radcliffe".

Sunny Radcliffe  
Director, Government Affairs and Environmental Policy  
Portland General Electric