

Puget Sound Energy P.O. Box 97034 Bellevue, WA 98009-9734 PSE.com

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Washington State Building Code Council 1500 Jefferson Ave SE PO Box 41449 Olympia, WA 98504-1449

RE: Amendments to WA state energy codes - R33 Electric Readiness / R36 - R406 Credits

State Building Code Council Members:

Puget Sound Energy (PSE) supports increased energy efficiency through the enhancement of building codes. In the past we have supported code changes at the State Building Code Council (SBCC) that benefit the energy efficiency of the building stock, so long as the changes have been cost effective and supported by technical rationale.

PSE, an investor-owned utility, is the state's largest utility – serving more than 1.1 million electric customers and more than 800,000 natural gas customers.

There are several current proposals for amendment to the state's energy codes, in particular WSEC – R33 electric readiness and WSEC R36 regarding credits and carbon emissions factor, that we find concerning and believe require additional work before adoption.

## R36 – R406 Credits and Emission Factors:

As you are aware, PSE recently signed on to a petition to the SBCC regarding the reconsideration of the proposed emissions factor included in the energy code amendment package. That petition was submitted on August 14, 2019. For the record, we again note – pulling from the petition:

The Council approved an emissions factor for electricity of .7 lbs/kwh. The undersigned believe this is an inaccurately low emissions factor, based on an incomplete (or poor) technical rationale. We propose that a factor of .97 lbs/kwh is more accurate, defendable, fair and reasonable factor to use for the 2020 code.

Establishing a future emissions factor for electricity to be used as a basis for compliance in the WSEC is a technical and complex exercise, requiring high levels of expertise and experience and rigorous analysis.

It is incumbent on the SBCC to not only ensure that the code reduces energy use and emissions, but that the changes are well understood and are balanced against both the benefits and costs. We believe the SBCC needs to more transparently show the work and analysis that has been conducted to date to support such proposals.

Additionally, we note that the changing of the credit system to provide beneficial credit to a heat pump meeting minimum federal standards, while disvaluing alternative or existing technologies, violates the purpose and intention of adopting standards to comply with the statutory goals.

Adoption of the proper emission factor and a fair credit assignment system can achieve the same results of greater efficiency and reduced emissions.

WSEC – R33 Electric Readiness:

As proposed, this change would require for homes to be built with electric receptacles adjacent to other installed energy alternatives for noted appliances. In a letter to the SBCC dated June 10, 2019, Gary Heikkinen – a member of the Energy Code TAG – noted several concerns about the proposal.

1. It will add cost, sometimes significant, without any energy savings. Therefore, not cost-effective.

2. This same proposal was disapproved at the recent IECC committee hearings for the 2021 IECC.

3. If the proposal is truly meant to protect home owners from future costs, shouldn't it also include the installation of gas hook-ups next to electric appliances?

4. The proposal is trying to address an uncertain future that may never happen.

In addition to the concerns raised by Gary, we would note that this particular provision is tantamount to forcing of fuel switching through a preferred bias of support for one technology over another. In recent legislative debates, including the passage of HB 1257 – concerning energy efficiency and SB 5116 – supporting Washington's clean energy economy and transition to a clean, affordable, and reliable energy future, the Legislature was mindful to not abandon a technology neutral approach. Adoption of both of these policies acknowledges the need for energy options – even in the built environment.

Furthermore, it is important for the SBCC to show the cost benefit analysis conducted that contemplates the costs and impacts associated with fuel switching. Have you considered the cost to electric system, including:

- Changes to load forecasts and demand;
- Reliability and resource adequacy of the delivery system;
- Shifts in peak demand from electrification;
- Customer choice and costs to the customer as a result of these changes.

PSE estimates that the shift to all electric new construction could result in significant grid infrastructure including substations, circuits, and transformer upgrades to meet this added load. Over 20 years this could be upwards of \$80-100 million. These, and other factors, should be part of the SBCC's costs and benefits discussion.

As a dual energy utility it is important that changes proposed to modify the state's energy codes work to achieve a balance. We support cost effective conservation, as well as reduce emissions in our built

environment. As evidence from our concerns raised above, we do not believe that all of the proposal before you are ready for adoption and implementation.

Therefore, we would as the SBCC to either delay adoption, or set aside those provisions that need more work. There are many ways to reduce emissions and find energy efficiencies – the SBCC should look to do so without limiting customer choice, and introducing technology bias.

Sincerely,

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Robert Stolarski Director of Customer Energy Management Puget Sound Energy