To: SBCC

From: Holly Townes, ME PE - Energy Efficiency Engineer

RE: WSEC proposal from MEV Tag - Testimony given 9/17/2021

Hello my name is Holly Townes, I am a licensed mechanical engineer who has specialized in energy efficiency in buildings my whole career. I am also a long time Washington Resident, among other things I worked as a commissioning agent and for 2 utilities in the state and am active in ASHRAE. In retirement I have volunteered to advocate for thoughtful, informed and reasonable actions to fight climate change in the building sector.

I am here to support the long efforts of the MEV committee to meet their obligation to reduce energy and emissions of GHG in the State Energy Code. The Energy Code has gone very far in improving efficiency, now on of the next most cost-effective step to meet our state's climate goals is reducing substantially, not eliminate, the use of fossil fuels and electric resistance for space and water heating. I specifically support and ask you to support the space and water heating efficient electric equipment proposals recommended by the MEV and proposed by RMI.

When I worked at PSE in the Commercial Energy Efficiency Program, we incentivized new buildings to convert from electric heating to gas heat. It made sense at the time where electricity was produced from coal and gas. But now fossil fuel on site does not make sense for any part of our state since all electricity will soon be from clean sources. Now is the time to move away from fossil fuel heating to efficient electric heating to meet the state mandates to combat further climate change.

Heat pumps are an efficient and effective way to cut energy and fossil fuel use in buildings. Since 2000 (20 years) I have worked on many commercial buildings in the NW and California which used heat pumps successfully for heating. They do work and work well. New technologies and refrigerants continue to come online that will make them even easier to use and better for the environment.

Buildings are the second largest contributor to GHG. All buildings will need to be addressed in the coming years. It will be far cheaper to make these changes at the time of construction than having to retrofit more buildings. New buildings are the best way to start on moving away from fossil fuels and due to their lower energy use will not tax our electric grid before it is ready.

In truth I don't think the proposed code changes go far enough to reduce fossil fuels, with all the exceptions had to satisfy stakeholders. Despite the many compromises though the proposal is a concrete step forward to fight climate change so please support the reduction in fossil fuel or resistance heating in proposed energy code.

It is only natural that the gas industry is fighting this hard but this is the right way forward after many, many hours of committee work and compromise so I ask you to move these proposals forward without changes to allow full public comment.

Thank you for your time and your many hours of effort to make this next crucial informed, reasonable and thoughtful step for the good of the citizens of our state.