Feb. 12 2025 Supporting SB 685

Dear Chair Sollman, Vice-Chair Brock Smith, and members Golden, Pham, and Robinson,

Thank you for the opportunity to submit this personal comment separate and distinct from the comment I submitted on behalf of the CRP Portland Chapter.

My name is Helena Birecki and I'm in favor of hydrogen oversight. I live in NW but joined friends in SE Portland at the community meeting. *This personal comment is based on the SE Portland community meeting, follow-up communication with Michael Jung from Modern Hydrogen, and a review of the NW Natural employee comments from Monday's hearing.*

One: non-notification is a threat to consumer rights, public safety, and health:

I believe the NW Natural employees who say their pipes are safe up to a 20% blend. And that various high tech systems can handle high levels of hydrogen right now. But most people's heaters and gas stoves are neither high tech nor safe up to a 20% blend. As NWN said on Monday, modern **residential appliances are only rated for 5%** hydrogen blending, but NWN also said they could start blending up to 10% tomorrow without any further notification of customers or regulation by the PUC.

Fire Department, other public safety officers, and gas utility customers need to have transparency about what is being put through pipes at what levels in order to understand and respond to potential risks and emergencies. Oregon has charged the PUC to "ensure Oregonians have access to safe, reliable and fairly priced utility services that advance state policy and promote the public interest." Give them the information to do their job.

If customers don't have any data about hydrogen in the gas supply, how could you possibly correlate it to upticks in home fires or health problems like asthma? Non-notification may protect gas suppliers, but it does not protect average Oregonians. Health and safety burdens from potential hydrogen interactions with piping or appliances inside homes in all likelihood will most burden the most vulnerable Oregon communities— families who are renters, cash-strapped, time-strapped, and/or information-strapped— due to issues like less ventilation in units and the inability to purchase the newest fanciest appliances.

Two: hydrogen blending is a threat to utility affordability.

In follow-up communication with Michael Jung– the representative from the company NW Natural is partnering with for turquoise hydrogen who came to the community meeting: He said, and confirmed in an email, that at this point natural gas (methane) pyrolysis could use **up to three times more methane to deliver the same energy**

value, but plugged that in the long run they will fix inefficiencies and then it would use only double the amount of methane. The IEER technical memo submitted to this committee also indicates that double the methane is likely the ceiling for the efficiency of this technology, and that if methane leaks occur at industry averages then this negates any climate benefit from pyrolytic hydrogen blending.

Gas costs are already high. People don't want to pay for double or triple the volume of methane for the same or worse results.

Three: hydrogen in homes cannot be a climate solution, and is likely a climate disaster:

First, the idea that renewable natural gas will lower the overall emissions of hydrogen blending is not credible.

- Despite saying for years that they will significantly replace fossil gas with RNG, around 99% of NW Natural's gas supply continues to come from fossil fuels.
- The Oregon Department of Energy has evaluated that if every source of RNG were tapped, only 4.6 to 17% of current natural gas needs in Oregon could be met by RNG.
- Don't squander the scarce resource of RNG on a system– residential and commercial heating, water heating, and cooking– which could far more efficiently be electrified, and then waste half to 2/3 of it again on conversion to hydrogen.

Second,

- Methane leaks during natural gas production, transmission and storage cause much of its real-world greenhouse gas emissions and health harming pollution.
- Keeping in mind that heating or cooking with turquoise hydrogen would use 2 3 times the amount of methane, even when the industry matures, that's **2 3 times the amount of methane leaks** upstream of the hydrogen production.
- There's mounting evidence that hydrogen leaks also increase global warming, because hydrogen is an indirect greenhouse gas.

Hydrogen in homes is a waste of an important resource, a financial burden, and a risk to lives and property.

Put simply, **hydrogen in homes is a bad investment.** Don't make ratepayers, or taxpayers, or our health, pay for it. But at the very least, let us know when and how much of it is coming into our homes.

Thank you, Helena Birecki Portland, OR