To: Oregon Public Utility Commission 201 High St. SE, Suite 100 Salem, OR 97301

From: Melanie Plaut MD

Submitted via electronic filing to puc.filingcenter@puc.oregon.gov

RE: OPUC Docket LC 79 - Comments on Final Staff Report 3/30/2023

I appreciate the work that staff put into their final comments, and agree with many of their conclusions.

I would take issue with the recommendation to acknowledge the \$10-15 million replacement of the PDX LNG Cold Box (Action Item #2).

There are two reasons to delay or condition this acknowledgment.

- 1. Seismic vulnerability: The LNG tank and the cold box are located in the Critical Energy Infrastructure Hub, on infill prone to liquefaction in the case of a seismic event. As such the tank is subject to Senate Bill 1567, which is currently completing its rule-making phase under the Department of Environmental Quality. Facility assessments will have to be completed by mid-2024; will be vetted by DEQ thereafter; and timelines for hardening or removal of tanks will be established. It would be prudent to wait for any investment in a new cold box at least until the assessment and vetting by DEQ has been completed.
- 2. Electrification is accelerating: Any new investment in the cold box may be unnecessary by the time its replacement is completed in 2027. Estimates by NW Natural have not taken into full account the number of homes likely to electrify under rebates and tax credits which will be available in 2023-2024 and beyond via the federal Inflation Reduction Act, as well as state and local incentives (Energy Trust of Oregon, Portland Clean Energy Fund, etc).

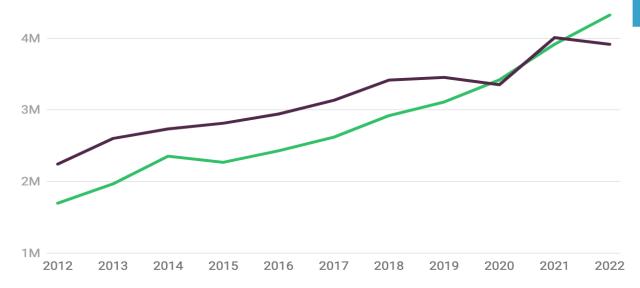
According to the NW Natural IRP (p 250), "A SynergiTM analysis was used to determine the maximum firm demand the system could serve if Portland LNG were decommissioned and no other system reinforcement projects were constructed. For this analysis, the Williams supplies were fixed to their current capacities and load was reduced until SynergiTM was able to solve. The model solved after firm demands were reduced by approximately 16% from 2022 forecasted peak demands. This suggest that firm sales peak demand would need to be below 830,000 Dth/day to decommission Portland LNG and not need one of the other alternatives discussed above."

Gas furnaces have a lifespan of somewhere around 20 years, which means that approximately 5% of all furnaces will need replacement annually. Nationally, electric heat pump sales in 2022 exceeded gas furnace sales (see image below). If just half of gas furnaces in the area served by PDX LNG were replaced with heat pumps as they reached the end of their lives, within about six years the PDX LNG would no longer be necessary, as at least 15% of natural gas furnaces would have been removed. It is quite possible that this transition may happen considerably more quickly. Once again, it makes sense to wait until we are able to observe the rate of electrification of home heating over the next couple of years before investing in new gas infrastructure.

Thank you. Melanie Plaut MD

Heat pump sales in U.S. surged past gas furnaces in 2022

— Heat pump sales — Gas furnace sales



2022 figures include sales data for Jan-Nov and projected sales for Dec.

Chart: Canary Media • Source: Air-Conditioning, Heating, and Refrigeration Institute • Embed • Download image