Pipeline Safety

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Senator Janeen Sollman Chair, Senate Committee on Energy and Environment Oregon State Legislature 900 Court St. NE, Salem Oregon 97301

RE: Letter of Support of Senate Bill 685

Chair Sollman, Vice Chair Brock Smith, and Members of the Committee,

Thank you for the opportunity to comment in support of Senate Bill 685 relating to hydrogen. It is the Pipeline Safety Trust's (the Trust) position that this legislation is an important advancement in public transparency and regulatory oversight of hydrogen blending in gas distribution systems.

The Pipeline Safety Trust is the only national non-profit organization that focuses on pipeline safety. Our efforts focus on education and advocacy, increasing access to information, and building partnerships with residents, safety advocates, government, and industry to promote safe communities and a healthy environment. As part of this work, the Trust monitors state legislation and submits comments where its technical expertise may be beneficial.

Hydrogen is not the same as methane, the primary component of natural gas, and has unique safety concerns when blended into a gas distribution system.¹ Hydrogen is much more likely to explode than methane, and those explosions are larger and burn hotter than methane. In addition, many pipeline materials are not suitable for transporting hydrogen, which can lead to embrittlement and cracking issues. Hydrogen is also a much smaller molecule than methane which allows it to leak much easier and faster. These distribution systems move gas through densely populated areas and into people's homes and businesses, often relying on older, leak-prone pipe infrastructure.

While the natural gas industry often points to a single small system in Hawaii that has included hydrogen in its distribution system as proof of its safety, there are unique circumstances, such as lower gas pressures and generally increased structure ventilation, in that single system and climate that limit its usefulness as an example. The federal regulator, PHMSA, has acknowledged numerous challenges and uncertainties with blending hydrogen into natural gas pipelines.² There are also numerous reports and research projects identifying the risks of blending hydrogen into natural gas pipeline infrastructure.³

² <u>https://primis-</u>

¹ <u>https://pstrust.org/wp-content/uploads/2023/01/hydrogen_pipeline_safety_summary_1_18_23.pdf</u>

meetings.phmsa.dot.gov/archive/Day_2_PM_155_What_We_Regulate_Safety_Challenges_Hydrogen_Vinnie_Holo han.pdf

³ <u>https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M493/K760/493760600.PDF</u>

https://www.e3g.org/wp-content/uploads/E3G-Briefing-Decisions-on-UK-hydrogen-heat-1.pdf https://www.energy.gov/sites/default/files/2024-11/h2-emissions-workshop-4-barakat.pdf

Shockingly, there is no state or federal requirement for gas distribution operators to inform or report hydrogen blending activities. Federal regulations contain no safety standards specific to blending hydrogen with natural gas, and do not take into account the unique challenges and safety risks. Federal regulations do, however, require that operators send public awareness information to customers on a regular basis.⁴ Including information to the public about hydrogen blending activities should not be considered an additional burden on the operator.

Regulators have a responsibility to keep people safe and should know if operators are blending other gases into gas distribution systems, especially gases as explosive and potentially damaging as hydrogen. Additionally, the public has a right to know about the risks to which they are exposed. Senate Bill 685 is a good first step to increasing public awareness and transparency around hydrogen blending and improving regulatory oversight at the state level.

Thank you again for the opportunity to comment on this important legislation. If you have any questions, feel free to contact me at <u>amanda@pstrust.org</u> or (360) 543-5686 (x106).

Sincerely,

Amanda McKay

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Policy Manager Pipeline Safety Trust

⁴ <u>https://www.ecfr.gov/current/title-49/part-192/section-192.616</u>