

May 7, 2025

Dear Chair Lively, Vice-Chairs Gamba and Levy, and Members of the House Climate, Energy and Environment Committee,

## Re: SB 685A

Breach Collective (Breach) is a 501(c)(3) nonprofit organization based in Portland and Eugene. Breach's mission is to build power within the climate and labor movements through organizing, legal advocacy, education, and storytelling.

Breach supported SB 685 in its introduced form, and several of its earlier amendments. We are neutral on SB 685A. Although SB 685A would improve upon Oregon's existing regulatory environment concerning hydrogen blending, we have reservations about the 2.5% threshold for the notice requirements in the bill. This threshold would not correct the public notice failure that inspired this bill.

Specifically, NW Natural failed – and continues to fail – to directly and appropriately inform gas customers and residents in the Southeast Portland area that are currently receiving a 0.02% blend of hydrogen (produced by NW Natural's pilot project with Modern Hydrogen). Simultaneously, NW Natural has touted this project to legislators, local government elected officials, and the media throughout Oregon.<sup>1</sup> It has been left to community advocates to fill the public information gap left by the utility.

NW Natural also has vigorously opposed the notice requirements in this bill at each step leading to SB 685A. In doing so, they have simultaneously and incoherently portrayed hydrogen blending as both a benign, *de minimis* activity undeserving of regulation, and a powerful climate solution benefiting customers and the climate. As we have said throughout this process, NW Natural cannot have it both ways.

<sup>&</sup>lt;sup>1</sup> See, e.g., Danny Noonan, *Supplemental Testimony in Support of SB 685* (Breach Collective, Feb. 12, 2025), pp. 3-7, <u>https://olis.oregonlegislature.gov/liz/2025R1/Downloads/PublicTestimonyDocument/128052</u>.

Hydrogen is, in reality, an inherently limited climate intervention: at a 0.02% blend, 2.5%, or even a hypothetical 20% blend.<sup>2</sup> This is the case even assuming that the industrial process to produce hydrogen involves zero greenhouse gas (GHG) emissions – as would only be the case with electrolytic hydrogen produced using dedicated renewable resources. As evidence in the legislative record has already demonstrated, blending so-called "turquoise" hydrogen (produced by methane pyrolysis) into buildings likely results in the same or greater GHG emissions than using the methane directly.<sup>3</sup> Turquoise hydrogen is also not, in even a remote sense, "renewable;" it is produced from fossil methane, and neither NW Natural or Modern Hydrogen have announced plans to produce it from renewable natural gas.

Hydrogen blending is demonstrably not a cost-competitive emissions reduction solution in residential and commercial buildings compared to electrification.<sup>4</sup> We would be much more receptive to NW Natural and the wider gas and hydrogen industry's concerns about this bill if we has seen any evidence that they were conscientiously pursuing the lowest-emitting and best use cases of hydrogen: green electrolytic hydrogen, used directly in 100% or near-100% blends in industrial processes. Yet, NW Natural appears to have abandoned its electrolytic hydrogen plans, and, unlike Puget Sound Energy, is focusing its turquoise hydrogen blending on its retail distribution

<sup>3</sup> See IEER, *Northwest Gas proposal on mixing pyrolytic hydrogen with natural gas* (Dec. 10, 2024), 2, <u>https://olis.oregonlegislature.gov/liz/2025R1/Downloads/PublicTestimonyDocument/123661</u> (demonstrating that because methane pyrolysis requires methane as a feedstock to produce hydrogen, the assumed upstream methane leaks associated with this additional methane consumption offset any emissions benefit). See also Noonan, *supra* note 1, pp. 1-2 (showing that, whereas a 100% efficient methane pyrolysis process might use twice as much methane as combusting methane directly, Modern Hydrogen has admitted their technology is less efficient and uses *three-times* as much methane to produce equivalent quantities of hydrogen). In light of this evidence, Modern Hydrogen's repeated claim that their methane pyrolysis technology producing hydrogen by using greater quantities of methane than would otherwise be consumed is somehow "decarbonizing" methane is ridiculous. Their messaging has undermined this legislature's ability to understand the actual GHG intensity and emissions reduction potential of turquoise hydrogen. See Michael Jung, *Support for SB 685* (Modern Hydrogen, May 6, 2025), <u>https://olis.oregonlegislature.gov/liz/2025R1/Downloads/PublicTestimonyDocument/202087</u>.

<sup>&</sup>lt;sup>2</sup> Mathias Zacarias and Joseph Majkut, *What Happened to Hydrogen in the EPA's Power Plant Rule?* (Center for Strategic and International Studies, Jun. 12, 2024),

<sup>&</sup>lt;u>https://www.csis.org/analysis/what-happened-hydrogen-epas-power-plant-rule</u> (finding that the additional volumes of hydrogen needed to produce the same energy as methane – that is, the lower energy density of hydrogen – means that a 20% blend of hydrogen to methane would achieve only 7% emissions reductions versus a 100% methane gas).

<sup>&</sup>lt;sup>4</sup> American Council for an Energy Efficient Economy, *Report: Electrification Costs Less than Alternative Fuels for Hardest-to-Decarbonize Buildings* (Apr. 30, 2025),

https://www.aceee.org/press-release/2025/04/report-electrification-costs-less-alternative-fuels-hardestdecarbonize. See also Nathan Johnson et al., *Realistic roles for hydrogen in the future energy transition*, Nature Reviews Clean Technology (2025), https://www.nature.com/articles/s44359-025-00050-4.

system.<sup>5</sup> Instead, it has used a hypothesized future use case for hydrogen blending in defense of its current, inappropriate use in Portland.

Because of this, it is difficult to escape the conclusion that hydrogen blending, for NW Natural, is simply a public relations tool in its ongoing efforts to oppose electrification policies. We appreciate that this bill would give some guardrails to future hydrogen blending, and we hope its passage will encourage sounder use cases for hydrogen development in Oregon. However, we remain concerned that the compromises struck in SB 685A mean that the more cynical proposal for hydrogen blending we have seen occur in Oregon thus far will continue to evade accountability and slow down genuine building decarbonization.

Sincerely,

Danny Noonan, Climate and Energy Strategist, Breach Collective

<sup>&</sup>lt;sup>5</sup> See Puget Sound Energy, *Puget Sound Energy and Modern Hydrogen forge decarbonization path with innovative hydrogen technology* (Jan. 29, 2025), <u>https://www.pse.com/en/press-release/details/PSE-and-Modern-Hydrogen-forge-decarbonization-pat</u> <u>h-with-hydrogen-technology</u>.