## The Register-Guard

**NEWS** 

## Groups oppose NW Natural plan to blend hydrogen with Eugene natural gas



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A coalition of local environmental groups is asking the Oregon Public Utilities Commission to halt plans for an experiment in blending hydrogen into the natural gas pipelines leading to some west Eugene homes and businesses.

NW Natural is planning to mix hydrogen with the natural gas flowing to more than 2,400 west Eugene customers as early as 2024, a small-scale test for the utility's potential future use of the practice called "hydrogen blending." Though the practice reduces carbon emissions, some are saying it is an unsafe plan meant to greenwash a fossil fuel company.

Beyond Toxics, NAACP Eugene-Springfield, Oregon Physicians for Social Responsibility, 350 Eugene and Sierra Club, represented by attorneys from Earthjustice and the Green Energy Institute, sent a petition to intervene to the PUC and were approved. This allows them to make filings and pleadings in the case and participate in all scheduled events.

They will make the case the PUC should reject the proposal, citing safety and health concerns, as well as other issues.

The schedule for the proceedings still is being finalized.

More: NW Natural plans to blend hydrogen into some west Eugene customers' gas

"This idea of hydrogen blending is really new. There's only a handful of these proposals actually moving forward in the entire United States," said Dylan Plummer with the Sierra Club. "It's striking to us they chose a historically underserved community like Bethel that's been dealing with these environmental justice concerns for decades as their guinea pigs."

The Oregon Citizens' Utility Board also filed a notice of intent to intervene in the proceeding.

NW Natural filed plans for the hydrogen project with the Oregon Public Utility Commission in August. The company wants to build a 1 megawatt electrolyzer, which splits water's hydrogen and oxygen molecules, and use the hydrogen to replace between 5% and 10% of the natural gas going to more than 2,460 customers set to participate in the pilot project.

All NW Natural customers will share the project expense, which the utility expects will raise bills 15 cents per month.

Hydrogen is a non-carbon fuel, and replacing portions of the natural gas currently in the pipelines would reduce the utility's total emissions. NW Natural expects the pilot project will cut 228 metric tons of carbon dioxide equivalents, which the U.S. Environmental Protection Agency estimates is about the same emissions 49 gas cars create in one year.

The pilot project isn't meant to be a large-scale emissions reductions effort, but rather a test for future implementation.

"We are puzzled to hear that Sierra Club, which typically supports clean energy initiatives, is positioning itself as a barrier to decarbonizing our system. Similar to where wind and solar started, clean hydrogen has the potential to grow to play an essential role in reducing emissions and achieving a clean energy future," NW Natural said in a statement.

Critics of hydrogen blending believe the impact on greenhouse gas emissions would be minimal while taking attention and resources away from more effective electrification strategies. Critics also fear the practice is both unsafe and costly.

More: Eugene, NW Natural disagree on whether to link franchise agreement, climate goals

NW Natural could not renew its franchise agreement with the City of Eugene after lengthy negotiations concerning climate goals failed last year. The city is moving toward an electrification strategy in an effort to phase out fossil fuels.

Some of the most vocal local groups pushing for electrification in Eugene — and who urged the city not to renew the agreement with NW Natural — are represented among the petitioners trying to stop the "Eugene Hydrogen Project."

Lisa Arkin, executive director for Beyond Toxics, believes the hydrogen project will put residents of west Eugene at risk.

"The homes along the route NW Natural has picked out to deliver blended gas are in areas of the city that are already stressed. ... yet in this process they don't get a choice. NW Natural is going to make that choice for them," Arkin said.

The petitioners pointed to the fact hydrogen can ignite more easily than natural gas and has the capacity to embrittle pipelines. They pointed to a study from the United Kingdom suggesting explosions would be more frequent in homes if hydrogen replaced natural gas, though the assessment notes the risks can be reduced using appropriate hardware.

They also highlighted a Physicians for Social Responsibility report from this year opposing hydrogen blending projects. The report says more independent research is needed to determine if hydrogen can be delivered to homes safely, and suggests hydrogen blending, often derived from methane instead of water, could lead to more leaks and health issues.

"As a physician, I'm deeply concerned about the health and safety risks associated with burning a hydrogen-methane blend in our homes — particularly for vulnerable populations and communities who already face disproportionate health burdens due to air pollution and climate change," said Dr. Melanie Plaut with Oregon Physicians for Social Responsibility in a news release announcing petitioners' call for the PUC to reject the hydrogen blending proposal.

In its statement, NW Natural pointed to utilities in North America and Europe already safely blending hydrogen and natural gas. NW Natural has been using 5% blends of natural gas at its Sherwood operations center for two years.

"The Eugene project will build on these small-scale learnings to further validate what we know and help accelerate the deployment of this effective technology solution," NW Natural said in its statement. "There is growing recognition of the potential of hydrogen to become one of the cleanest and lowest cost sources of energy across the country."

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