

Testimony in Support of L.D. 1473, "An Act to Require Utilities to Monitor Meters for Natural Gas Leaks"

April 24, 2025

Senator Lawrence, Representative Sachs, and Committee Members:

My name is Seth Berry, I am Executive Director of Our Power, and I live in Bowdoinham. Our Power is a Maine nonprofit advocating statewide for energy democracy. To us, "energy democracy" means informed and empowered citizens, community-focused energy systems, and utility accountability. This bill is about utility accountability.

While the shift from coal to methane in recent years has been described as climate positive, there are reasons to doubt this. In fact, according to a recent RMI paper, gas may be as bad as coal in its near-term impact. In part, this is because methane is about 80 times more apt to warm our climate than CO2. For this reason, if it escapes before being burned, it has an outsize impact. As the RMI paper models it, leakage of just 0.2% from anywhere in the gas system – from fracking well to your home – is enough to make a gas as harmful to climate as coal in the coming decades.

Maine's infrastructure is newer and so in better shape than many. However, leaks at the outside of gas meters have been identified not only in older meters, but in new meters that are newly installed. This may occur due to a faulty installation, or a faulty product.

In the past, we have tended to regulate leaks as a safety matter, focusing especially on indoor leaks. We appreciate the sponsor for bringing this bill forward, and taking it up in light of our climate goals.

While we support this bill conceptually, we would suggest that it become a bill or a resolve, asking the PUC to conduct random, independent audits of gas lines and customer meters at each of Maine's gas utilities. By checking at random, the PUC would have another data point to assess whether utilities' self-reported leakage data is accurate.

Additionally, we would like to see the amended bill require PUC or GEO monitoring of the federal gas leak rules recently drafted by the federal Pipeline and Hazardous Materials Safety Administration (PHMSA), and any developments in their enforcement. These rules

have not been amended since the early 1970s. While the new rules held some promise as of December 2024, it is unclear how the new administration in Washington will or will not view and/or enforce these rules. As the PUC or GEO monitors these developments, it could report back to this committee next year, possibly with recommended legislation to ensure that Maine's meters are as leak-free as possible.

Thank you, and I am happy to answer any questions you may have.

Seth Berry

Natural gas can rival coal's climate-warming potential when leaks are counted

Jeff Brady, National Public Radio, July 14, 20232:21 PM ET



The natural gas production and supply system leaks the powerful greenhouse gas methane during drilling, fracking, processing and transport.

Meredith Miotke for NPR

Natural gas has long been considered a more climate-friendly alternative to coal, as gas-fired power plants generally release less carbon dioxide into the atmosphere than their coal-fired counterparts. But a new study finds that when the full impact of the industry is taken into account, natural gas could contribute as much as coal to climate change.

Natural gas is primarily composed of <u>methane</u>, a potent greenhouse gas. A new peer-reviewed analysis in the journal <u>Environmental Research Letters</u> finds that when even small amounts of methane escape from natural gas wells, production facilities and pipelines, it can drive up the industry's emissions to equal the effects of coal.

Recent studies have found much higher rates of leakage from natural gas infrastructure than previously known. Researchers wanted to understand the impact of those leaks.

"This analysis compares gas and coal at varying methane leakage rates. We find that very small methane leakage rates from gas systems rival coal's greenhouse gas emissions," said Deborah Gordon, co-author of the analysis and a senior principal at the environmental group RMI, formerly Rocky Mountain Institute. Scientists from NASA, Harvard University and Duke University also contributed to the paper.

That finding holds even if leaks amount to a tiny fraction of the methane in the country's gas production and supply system, as low as 0.2%, according to the researchers. The paper highlights recent surveys that found leak rates far above that, of "0.65% to 66.2%."

The study takes into account all stages of production and uses for both gas and coal in making the comparison. Researchers included in their calculations one counterintuitive effect of burning coal – it releases sulfur dioxide, which produces particles that reflect sunlight and actually reduce warming (sulfur dioxide pollution also can lead to heart and lung problems). Researchers also took into account the fact that coal production leaks methane.

The findings are a challenge to the natural gas industry, which bills itself as part of the solution to addressing climate change. Carbon dioxide emissions from power plants in the U.S. have <u>fallen about 35%</u> since 2005, largely because of the shift from coal to gas.

But the natural gas production and distribution system leaks methane from beginning to end, a problem producers say they are working to address through an <u>industry-sponsored program</u>.

"The U.S. natural gas and oil industry is leading the world in advancing innovative technology to better detect and reduce methane emissions, and U.S. methane emissions intensity are amongst the lowest of any major-producing nation," wrote Dustin Meyer of the American Petroleum Institute, in a statement.

Methane is a more potent greenhouse gas than carbon dioxide, though it doesn't stay in the atmosphere as long. Scientists are clear that the world needs to reduce both to avoid the worst effects of climate change.

The API didn't offer an assessment of this latest research. But to achieve and maintain a climate edge over coal, the natural gas industry may have to nearly eliminate methane leaks. That's difficult, and it comes as critics are working to find more leaks regulators and the industry may be missing.

Environmental groups say the Environmental Protection Agency currently undercounts methane emissions. Several groups have started looking for leaks themselves, using special cameras, aerial surveys, and increasingly powerful satellites. The conservation and advocacy group Environmental Defense Fund plans to launch what it says will be "the most advanced methane-tracking satellite in space" early next year.

Climate-warming gas leaks must be fixed by utilities in a new proposed rule



By <u>Jeff Brady</u>, National Public Radio, December 20, 2024

Gas utilities will have to check customer meters, like these in Darby, Pa., for leaks more frequently under proposed regulations from the Pipeline and Hazardous Materials Safety Administration.

PHILADELPHIA — Melissa Ostroff finds gas leaks for a living, so it was

surprising to hear someone say they smelled gas in her own home.

As part of <u>her job with the environmental group Earthworks</u>, Ostroff searches gas drilling and production sites in Pennsylvania for plumes of methane, a big driver of climate change. A few years back, her family visited her south Philadelphia row home for the holidays.

"When my sister entered the house, she told me she smelled gas," Ostroff says. Knowing that gas utility meters are a big source of leaks, that was the first place she examined with a device she uses for her job. "There was a small but very continuous leak coming from a pipe fitting around the gas meter."

Ostroff figures she had become accustomed to the odorant gas companies put in natural gas so customers will detect leaks. She called her utility, which fixed it right away. Aside from the safety concern, Ostroff knows that gas leaks are a problem for the climate. Methane is the main component of natural gas and, as one of the greenhouse gasses heating the planet, it is 80 times more potent than carbon dioxide.



Melissa Ostroff used an optical gas imaging camera to see a small methane leak from the gas meter in her basement.

Now, <u>under proposed federal regulations</u>, gas utilities would have to find and fix more leaks like this. At the end of his first term in office, President-elect Donald Trump signed an appropriations bill that included the new requirement. The Biden administration is finishing the rules to implement the law. In the past, utilities focused this work on safety and preventing explosions that hurt people and damage property. Under the new rules, they'll also have to consider environmental harm when searching for methane leaks.

A solution for the methane problem

You can't see methane, but a special infrared camera can. These costs thousands of dollars. Ostroff had one in her home because that's what she uses to find plumes at drilling sites. Now, she periodically checks the meter for leaks and says the problem appears to be fixed.



Melissa Ostroff used an optical gas imaging camera to see a methane leak from the gas meter in her basement.

Customer gas meters are the largest source of methane that escapes in the atmosphere from gas distribution systems. But leaks like this are not common. An industry study from GTI Energy showed less than 1% of indoor meters leak. But there are a lot of meters in the country, and it's easy to find customers online who say they've

<u>experienced leaks</u>. Outdoor meters are less of a risk for causing explosions because the methane disperses into the atmosphere. But there, methane becomes a problem for the climate.

The new gas leak rules have been drafted by federal Pipeline and Hazardous Materials Safety Administration (PHMSA), which regulates gas utility pipelines and other infrastructure, all the way up to and including customer meters. Because safety was the focus in the past, utilities detected some leaks, but they didn't reach the top of the repair list for years.

"I've found like 10-year-old leaks," says Erin Murphy, an attorney with the Environmental Defense Fund. "So they've known about this pipeline leak for 10 years and haven't fixed it because they're not required to."

PHMSA's proposed regulations that apply to gas meters are part of a larger group of regulations intended to reduce methane pollution from natural gas pipelines. The new rules are not as strict as Murphy would like, but she says they're an improvement.

"In the proposed rule, PHMSA would require operators to conduct more frequent leak surveys, to use more advanced technologies in those surveys, and to fix the leaks that they find more quickly," Murphy says.

Gas utilities say they already were reducing methane pollution. Their main trade group, American Gas Association (AGA), says methane emissions from utilities are down 70% since 1990. Still, they say they are generally supportive of PHMSA's proposed rules and the law requiring them.

"It makes a heck of a lot of sense for us to codify something that, frankly, we're all kind of doing already," says Erin Kurilla, executive vice president at the American Public Gas Association (APGA), which represents publicly owned utilities.

The APGA, AGA and related trade associations filed <u>77 pages of comments and suggestions on the proposed rule</u>, but Kurilla characterizes most of the areas of contention as "paperwork provisions."

"We like where PHMSA is headed. We think methane reduction is important," says Lloyd Yates, president and CEO of the Indiana-based utility company NiSource. He also chairs AGA's board of directors. He does have questions about how much the new regulations will cost. "As you try and drive methane down, you spend more money on that and you got to do this in a way that's affordable for customers."

Given this general support from the industry, most people interviewed for this story don't expect big changes to these regulations from the incoming Trump administration, which didn't respond to a request for comment. The rules could be finalized as early as next month.