

Pacific Northwest and the U.S. Rely on the Gas System

Frigid temperatures that hit the Pacific Northwest during the week of January 13-19 resulted in record-breaking natural gas deliveries on our system. This came at a time when the electric system was experiencing widespread power outages due to the severe weather. Through careful planning, hard work and dedication, our field crews and operations teams kept the gas flowing safely for about 2 million people in the region, many of whom were without power but could still rely on direct use of natural gas in appliances like gas fireplaces, water heaters, stoves, and generators.



System Planning Delivers Results

NW Natural's customers relied on our system like never before, with 9 million therms of gas deliveries to homes and businesses on Jan. 13, 2024, virtually matching our previous record set in Dec. 2022, and about double our average daily winter send out.

9M therms



Indispensable Energy Storage

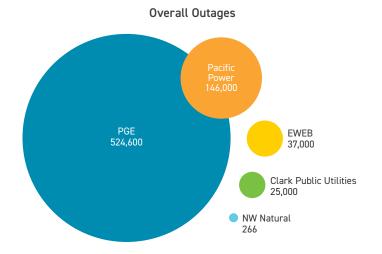
NW Natural's unique, on system storage facility in Mist, Oregon provided a new record volume of over 4.5 million therms of gas on Jan. 13, 2024 – **the equivalent of serving 630,000 residential customers in a day.** This year, we will distribute \$29 million in bill credits to customers due to our Mist storage assets and pipeline capacity management.

630,000



Storm Shows Critical Need for Energy System Diversification

Hundreds of thousands in the Northwest were without power at some point during the severe weather event of Jan. 2024. While all energy systems faced challenges to mitigate, thanks to our underground energy delivery system, NW Natural was able to retain service to all but about 266 customers.



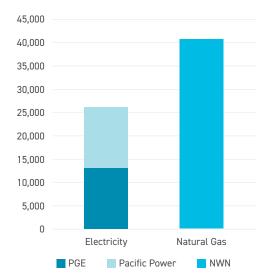
Sources: https://portlandgeneral.com/news/2024-01-22-pge-restoration-complete-from-severe-winterweather#:~:text=Customer%20outages%20over%20the%20nine, access%20and%20extended%20 restoration%20times

https://www.pacificpower.net/about/newsroom/news-releases/power-restored-for-most-oregonians.html https://www.eweb.org/your-public-utility/news/nine-days-without-power-my-ice-storm-story-as-an-ewebcustomer-and-employee

https://www.columbian.com/news/2024/mar/20/january-storm-cost-clark-public-utilities-about-26-million/

Heating Reliably

During the highest energy use hour on Jan. 13, 2024, NW Natural delivered **55% more energy** than local electric providers, Portland General Electric and Pacific Power, *combined*.



Delivered Energy On the Peak Hour January 13, 2024 (MMBtu/Hr)

Source: ICF using U.S. Energy Information Administration real time operating grid data

55% more energy than local providers

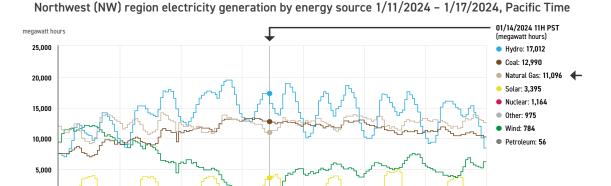
NW Electric System During Weather Event

While NW Natural does not sell natural gas to electric utilities, they heavily rely on it to produce power - along with hydro and coal.

Nationally, natural gas, coal and nuclear provided 81.6% of all electric generation on Jan.15, 2024.

Source: U.S. Energy Information Administration Hourly Electric Grid Monitor, https://www.eia.gov/ electricity/gridmonitor/dashboard/electric_overview/ regional/REG-NW

https://www.aga.org/research-policy/resourcelibrary/natural-gas-market-indicators-special-edition/



15 Jan 2024

Natural Gas Solar Other Wind Petroleum Nuclear Electrification is Not Decarbonization

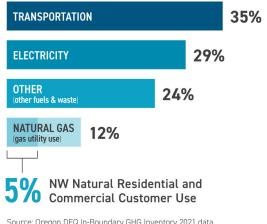
16 Jan 2024

Emissions from our residential and commercial customers account for about 5% of Oregon's total greenhouse gas emissions. Transportation and electricity use remains the largest source of emissions in Oregon.

17 Jan 2024

18 Jan 2024

Oregon Greenhouse Gas Emissions by Sector



Source: Oregon DEQ In-Boundary GHG Inventory 2021 data.

Policies designed to "electrify" natural gas space heating fail to answer three key questions:

- Why would we limit or ban natural gas use in homes and businesses only to use even more of it in electric power plants during cold weather?
- 2 What is the cost to ratepayers of this policy?

3 And how will it affect energy reliability?

Customer Perspectives

The January 2024 severe weather event reminded many of the customers and communities we serve about the critical role of natural gas for a reliable, resilient energy system.

n

-5,000

11 Jan 2024

Hvdro

12 Jan 2024

- Coal

13 Jan 2024

14 Jan 2024

- "...has a gas stove and was able to heat up food... Other strategies that people reported using in Facebook posts included firing up gas fireplaces..."
 - -The Oregonian
- "...Luckily for them they've got a generator and a gas stove to heat food ... '

- KGW

"A gas fireplace and lots of batteries."

- A reader in response to a Pamplin Media poll about how they were handling the storm

"Our gas fireplace has kept us warm today. No power since 11:10 am. Able to eat warm food cooked on the stove and stay warm during the storm. Thanks @nwnatural!"

- A NW Natural customer on social media

Record Natural Gas Use by **Electric System**

Natural gas provided 62% of all the energy delivered across the U.S. during the week of Jan. 13-19.

Source: https://www.aga.org/researchpolicy/resource-library/natural-gas-marketindicators-special-edition/

