

Natural Gas Pipeline Winterization Preparations

INGAA members take several proactive steps to prepare for winter weather as part of their commitment to the safe, secure, and reliable transportation of natural gas throughout the country. INGAA members' winterization plans generally focus on three key areas:



Asset Integrity



Stakeholder Coordination



Personnel Safety

Asset Integrity

In advance of and throughout the winter heating season (typically November-March), INGAA members coordinate closely among gas control, marketing, commercial operations, field operations, and engineering personnel to identify and address, if possible, issues that may impact facility operations or maintenance during the winter. Our companies perform system maintenance on key equipment, including pipeline compressor stations, in advance to ensure that they are fully operational. We work to complete repairs and planned maintenance prior to the winter heating season.

Operational integrity and the continual flow of gas during extreme weather conditions require operators to undertake certain fundamental measures at facilities to maintain adequate pipeline pressure. Examples of actions taken by INGAA members to ensure reliable winter operations include:

- ◆ Coordinate with gas control to test run compressor units that are less active in off-peak periods;
- ◆ Evaluate the availability of critical equipment spares and inventory;
- ◆ Drain condensate and prepare equipment components to prevent freezing;
- ◆ Insulate and test gas heating systems;
- ◆ Test-start and safety-check dehydration equipment;
- ◆ Verify snow removal plans, including marking critical objects along the path;
- ◆ Adjust meter run sequencing or change orifice plates to accommodate winter market flow rates;
- ◆ Check carbon monoxide, smoke, and gas detectors;
- ◆ Review, and update as needed, manual operating procedures;
- ◆ Adjust ventilation systems for cold weather operations;
- ◆ Test lighting at compressor stations, tank batteries, and brine disposal stations;
- ◆ Check drains and gutters for any obstructions; and
- ◆ Where needed, stage and test backup power generators.



"Pipeline operators implemented their winter operations programs which included performing preventative maintenance on compressor stations and at receipt and delivery points, testing all emergency equipment, servicing backup power supply sources, and performing any necessary equipment overhauls, among other tasks."

FERC-NERC Inquiry into Bulk-Power System Operations During December 2022 Winter Storm Elliot



Stakeholder Coordination

In preparation for and throughout the winter, INGAA member companies communicate closely with producers, marketers, customers, and Independent System Operators (ISOs)/Regional Transmission Organizations (RTOs). Many pipelines also hold pre-winter meetings with customers and other interested stakeholders to discuss typical capacity constraints during periods of unusually high demand, locations where requests for transportation historically exceed capacity, how extreme temperatures and conditions might require the operator to issue critical notices (such as to require shippers to remain within contract tolerances), and lessons learned from prior peak delivery events. These discussions help members proactively identify and prepare for potential issues or areas where pipeline capacity might be constrained and to take steps to implement potential solutions.

Some INGAA members have mutual aid agreements with partnering pipelines. Prior to winter, participating organizations check that these agreements and appropriate contacts are up-to-date and verify contact information for first responders, particularly at critical facilities. INGAA operators often partner with state and local emergency support function (ESF) agencies, including the Federal Emergency Management Agency (FEMA), and work through their sector risk management agencies and trade associations at the federal level to ensure ESF contacts are in place and any necessary waivers can be requested.

“Pipelines in the path of Winter Storm Elliot began to monitor the weather forecast as the storm began to form, while also implementing cold weather plans and holding internal meetings. These meetings focused on estimated load forecasts, storage strategies, maintenance activities, and line pack management strategies...some pipelines staffed key compressor stations that ordinarily are not staffed but are essential during peak demand for system reliability.”

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Personnel Safety

The safety of INGAA member company employees and the surrounding communities is of paramount importance. To ensure personnel are appropriately prepared for extreme weather conditions, INGAA operators crosscheck the availability of winter safety gear, including that food and other critical supplies are stocked at compressor stations in the event of constant monitoring. Operators review on-site safety protocols and implement additional personnel safety measures, as needed. We confirm that vehicles are operational, snowplows are installed, and routine maintenance is undertaken. INGAA members also look for opportunities to give back to the communities in which they operate in extreme weather events, by helping with snow removal, distribution of food and critical supplies, and sheltering, as appropriate.

About INGAA

The Interstate Natural Gas Association of America (INGAA) represents the vast majority of the interstate natural gas transmission pipeline companies in the United States. INGAA's members operate approximately 200,000 miles of pipeline, and serve as an indispensable link between natural gas producers and consumers.



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