

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division
Oversight and Safety Division



NOTICE TO GAS FACILITY OPERATORS AND GAS PIPELINE FACILITY OPERATORS

Preparation by Operators for Winter 2021-2022

Senate Bill 3 states the Railroad Commission of Texas shall require gas supply chain facilities and gas pipeline facilities, respectively, to “implement measures to prepare to operate during a weather emergency.” Adoption of the rules is tied to the map to be published by the Texas Electricity Supply Chain Security and Mapping Committee no later than September 1, 2022. Operators of gas supply chain facilities and gas pipeline facilities under the Commission’s jurisdiction are expected to take all necessary measures to prepare to operate in extreme weather conditions during the winter season of 2021-2022. The Commission’s highest priority is to ensure that should another extreme winter weather event occur, all available natural gas under the jurisdiction of the Commission in the state is available to be utilized for reliable energy sources for Texans. The Commission is taking additional steps including on-site visits to assess operator preparedness. To ensure that gas facility operators and gas pipeline facility operators are implementing measures to prepare to operate during extreme weather conditions prior to publication of the map, the Commission’s Oil and Gas Division and Oversight and Safety Division jointly issue the following best practices for weatherization:

- Update the *Application for Critical Load Serving Electric Generation and Cogeneration* to your electric utility as early as possible.
 - Ensure that you have submitted and updated the above-referenced application to your electric utility for the upcoming winter season 2021-2022. The application may be found on ERCOT’s website at
https://www.ercot.com/files/docs/2021/03/15/Final - pdf - App_for_gas_pipeline_load_v020320.pdf.
 - The Commission previously notified operators of the application on March 17, 2021 and it is available on the Commission’s website at
<https://www.rrc.texas.gov/announcements/031721-updated-application-for-critical-load-serving-electric-generation-and-cogeneration/>.
- Methanol injection or drip.
 - Introduction of methanol into the gas stream by chemical injection pumps or into the pipeline by methanol drips lowers the freeze point of gas. Methanol injection can also be used to prevent freezing in pneumatic controllers, as well as in preventing liquids from reaching small orifices and passages in these instruments.
- Water removal by solid absorption.
 - Natural gas may be passed through dry bed or molecular sieves, which absorb water. These methods can be used to achieve very dry gas.
- Cold weather barriers.

- Cold weather barriers, such as wind walls, may be installed around certain compressors to block cold winds which may exacerbate freezing conditions. Wrapping and insulating surface equipment, injection lines, supply valves, water lines, and other equipment may also help to prevent freezing and stoppage of fluid flow.
- Heat.
 - Heat systems, such as heating blankets, catalytic heaters, fuel line heaters, or stream systems, can be effective for localized freezing problems. Coupling heat systems with insulation is a common technique for protecting flow lines in northern climates.
- Glycol.
 - Natural gas can be passed through glycol inside a contactor. Glycol absorbs water vapor entrained in the stream, allowing dry gas to pass through.
- System Design.
 - Careful planning during the design stage for measurement and regulating systems can reduce the chances of freezing. Any steps that reduce restrictions or prevent areas where liquids can collect will minimize the possibility of freezing. To avoid liquid accumulation, pipe configurations should be set up such that drainage slopes toward drain fittings in low spots. Prevent restrictions by using full opening ball valves and large diameter tubing. Liquids will be drawn toward leaks, so have a leak-free system with tubing that slopes back toward the pipeline.
- Drip Pots.
 - Drip pots and coalescers can be used to eliminate or reduce the amount of water in cases of severe liquid problems or when there is a slug of liquid in a gas supply used for instrumentation.
- Instrument Filters.
 - Filter dryers provide a clean, dry supply of gas to controllers and other instrumentation that functions using instrument gas. These units function under high pressure and can eliminate both liquids and particulates.

Please Forward to the Appropriate Section of Your Company