

RAILROAD COMMISSION OF TEXAS

Critical Infrastructure Division



NOTICE TO NATURAL GAS PRODUCERS, GAS FACILITY OPERATORS AND GAS PIPELINE FACILITY OPERATORS

Additional Best Practices for Winter 2021-2022 Preparations

The Railroad Commission of Texas' (Commission's) highest priority is ensuring all natural gas under the jurisdiction of the Commission in the state is available to be used by Texans during the next energy emergency. On November 30, 2021, the Commission adopted Texas Administrative Code §3.65, relating to Critical Designation of Natural Gas Infrastructure, defining critical gas suppliers and critical customers during an energy emergency. In October, the Commission issued a notice with best practices operators should take to prepare for winter. **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.** That notice is available on the Commission's website at https://rrc.texas.gov/media/r5dbn5b2/2021-nto_preparation-by-operators-for-winter_2021-2022_mlb_10-6-2021.pdf.

Since that notice, the Commission has conducted additional research on weatherization best practices by consulting with energy industry experts in Texas and other large energy producing states and Canadian provinces. RRC inspectors also identified additional processes through site visits, some of which may be appropriate to assist operators' efforts to prepare for extreme weather events. Below is a list of those additional best practices:

- **Line Heaters**

- Used in wells that flow predominantly gas and small amounts of water, with no appreciable oil, this equipment uses a gas fired flame to heat a fluid filled chamber inside the body of the line heater. Gas passes through a coil that is immersed in a chamber of warmed fluid, which increases the temperature of the natural gas as it passes. When sized appropriately for the volume of gas being produced line heaters effectively heat gas at the first potential point of freezing before it reaches downstream separation or treating equipment.

- **Hot Lubricant and Circulation Heater for Engine Oil or Fuel**

- Installing external block heaters with an external energy source such as a gas fed flame or electricity can maintain pump or compressor lubricants at an appropriate temperature, even when the equipment is not operational, making it easier to restart the equipment by keeping the oil/fuel in the engine at an elevated temperature. At freezing temperatures pumps designed to circulate lubricant have difficulty functioning,

but using hot lubricant and external block heaters can keep pumps and compressors functional and prevent freeze-offs.

- **Human Capital**

- While weather specific technologies are critical to sustain natural gas production during cold weather conditions, the maintenance and operation of these technologies begins with human capital—the people trained and able to ensure natural gas continues to serve its essential function in the electricity supply chain despite adverse conditions. Increasing staffing levels in advance of an extreme weather event ensures that appropriately trained employees are readily available—if not pre-positioned on-site—to resolve any equipment or instrumentation failures should temperatures fall below an acceptable operating temperature for sensitive equipment or instruments.

Please Forward to the Appropriate Section of Your Company