

Continuity of Operations

Planning for and Responding to Cold Weather Events

Planning: Curtailment of Commercial Loads

- **Meet with large volume users.**
- **Update contact list.**
- **Determine plant protection volumes of gas.**
 - **Minimum amount to protect facility from freezing damage.**
- **Establish criteria for curtailment.**
 - **System pressure levels;**
 - **Operational Flow Orders from suppliers.**
 - **Force Majeure Calls.**

Continuity of Operations & Curtailment Plans

- ***192.623 (b) No person may operate ... a distribution system at a pressure lower than the minimum pressure at which the safe and continuing operation of any connected and properly adjusted low-pressure gas burning equipment can be assured.***

Continuity of Operations & Curtailment Plans

- **Each operator needs a Plan to establish which customers will be curtailed if supply is lost.**
 - **Who is shut off from service first.**
 - **Relight Plan– Who gets service restored first.**

Prioritizing Curtailments

- **Curtail service based on the type of service:**
 - **(A) Interruptible customers;**
 - **(B) non-interruptible customers purchasing energy for resale;**
 - **(C) customers that volunteer to reduce energy consumption;**
 - **(D) commercial and industrial customers; and**
 - **(E) residential customers.**

Prioritizing Service Restoration

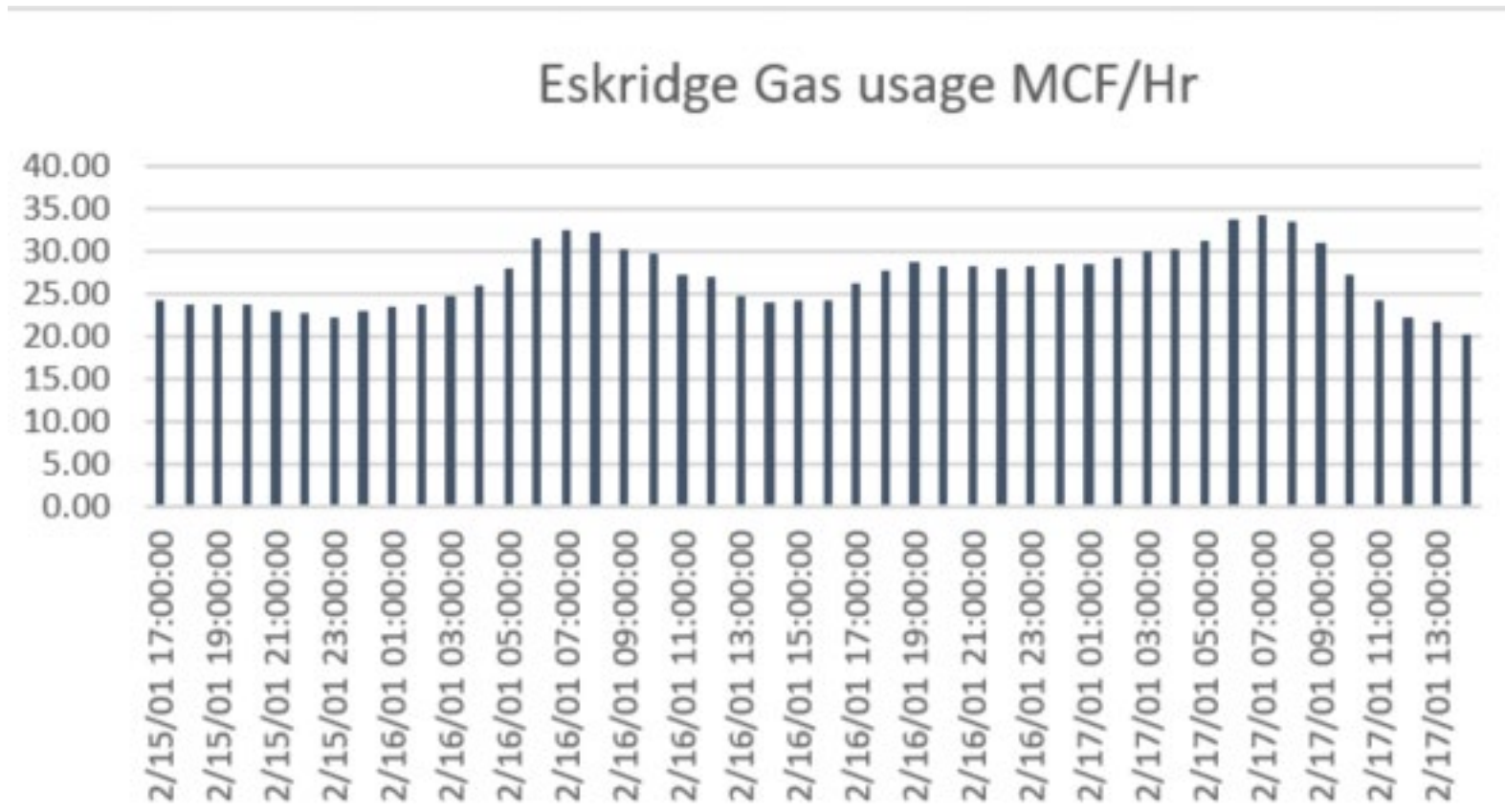
- **Service Restoration priorities *when practicable*:**
 - **(A) customers requiring immediate service to aid in the elimination of hazardous conditions;**
 - **(B) critical infrastructure without an operable alternative power source;**
 - **(C) the greatest number of remaining customers capable of being restored in the shortest time; and**
 - **(D) critical customers**

Critical Customers

- **Any customer who has provided the energy supplier with documentation of the necessity of a life-support system for which any interruption in energy service would be immediately life-threatening.**
 - **Mostly affects electric utilities;**
 - **Back up power generators fueled by gas?**
 - **Heat source for institutions with no mobility (prisons)?**

Planning: Loss of Gas Supply

- **Supplier contacts updated.**
- **Access to daily volume reports by hour.**



Planning: Loss of Gas Supply

- **Daily contact with marketer.**
- **Understanding Penalties that can occur during OFO.**
- **Understanding “Force Majeure” contract clauses.**
- **Additional staffing to take call volumes from customers.**
- **How to communicate with customers.**
 - **Provide price signals.**
 - **Encourage conservation.**
 - **Furnace controls during electrical outages.**

Planning: Cold Load Pickup from Electrical Outage

- **Cold Load Pickup**
 - **When electric power is restored, the natural gas system sees a spike in demand, which in turn draws down the pressure of the distribution system.**
- **Communicate with electric providers. Ask to be contacted before the electric utility RESTORES power.**

Planning: Know your Gas System

- **Observe system pressure and record where heavy gas use occurs during cold weather conditions.**
- **Consider if additional help is needed when cold weather arrives.**
- **If unprocessed gas or history of water in lines, plan on how to respond.**
- **Previous problems with equipment?**
- **Install chart recorders; or gauges at dead end points to monitor load demands during cold weather.**
- **Check accuracy of existing recorders and gauges.**

Planning: District Regulator Stations

- **Inspect regulator station**
 - **Working condition.**
 - **Spare parts available.**
- **Develop procedure for manual bypass operations.**
 - **Pressure monitor points;**
 - **All pressure gauges are operational.**
 - **All locks are accessible and protected from freezing.**
 - **Communications during manual bypass operations.**
- **Inspect odorizers.**
- **Blowdown drips.**
 - **All valves operational.**
- **Consider supply of methanol if gas freezing is an issue.**

Planning: Customer Outage/ Odor Complaint

- **Review emergency response plans.**
- **Mutual aid.**
- **Review customer service procedures**
 - **Fire dept used for assistance.**
- **Coordinate with plumbers on winterizing homes if service cannot be restored.**
- **Warming centers.**
- **Plan for relights.**
 - **Mutual aid**
 - **Review policy of relighting customer's appliances.**

Planning: Near Event

- **All vehicles fueled and warm.**
- **Winter clothing.**
- **Heat source to thaw locks or valves.**
- **Generators; light plants etc. Located or rented.**
- **Personnel to monitor emergency excavations.**
- **Kansas dig emergencies time Period 2/13/21 through 2/19/21**
 - **680 emergency water line repairs.**
 - **57 emergency sewer line repairs.**
 - **60 gas emergency repairs.**