

TR Number	2021-39
Primary	192.605, 613, 616
Secondary	192.631
Purpose	Evaluate guide material associated with transmission and gathering systems in light of effects of rolling or prolong power outages due to weather related events.
Origin/Rationale	TR 21–25 addressed impacts and precautions which should be considered when power outages impact gas distribution facilities. With more compressors employed which use electric prime movers, the potential for disruption and rolling or prolonged outages are possible.
Assigned to	OM/OQ Task Group

Section 192.605

Note: Although not required, Operators of Type B and Type C gathering lines are not required to comply with this section, but operators should consider establishing a procedural manual for Type B gathering lines. Operators with existing regulatory-required procedural manuals should consider using those manuals for Type B and Type C gathering lines.

1 GENERAL

- (a) Each procedural manual for operations, maintenance, and emergencies should include a written statement, procedure, or other document addressing each specific requirement of §192.605 that applies to the operator’s pipelines. The requirements of §192.605 are included in paragraphs that cover the following topics.
 - (1) General items related to the procedural manual (§192.605(a)).
 - (2) Maintenance and normal operation of any pipeline; (§192.605(b)).
 - (3) Abnormal operation of transmission lines, other than those transmission lines operated by distribution operators in connection with their distribution system (§192.605(c)).

3 ABNORMAL OPERATION OF TRANSMISSION LINES

3.1 General.

- (a) The abnormal operation requirements in §192.605(c) do not apply to distribution operators that are operating transmission lines in connection with their distribution system (§192.605(c)(5)).
- (b) An abnormal operation is a non-emergency event on a gas transmission facility that occurs when the operating design limits have been exceeded due to a change in pressure, flow rate, or temperature that is outside the normal limits. When an abnormal operation occurs, it does not pose an immediate threat to life or property but could if not promptly corrected. Where applicable, the actions to be taken by the transmission operator in each situation should incorporate the current procedures. The procedures should be specific enough to ensure uniformity of action relative to the situation, such as those referenced above, while allowing sufficient flexibility to consider the particular details, material, equipment, and configurations involved.
- (c) Some situations, such as planned rolling electric system blackouts or unplanned electric system outages, may not be classified as abnormal operation events, but they can be contributing factors that may trigger or lead to an abnormal operation event. In addition to the potential failure inoperability of certain electric-driven compressor units system components, it can-could result in a potential loss of SCADA system visibility, hindering remote monitoring or control, or both, of the facility affected by this power disruption.

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7 OTHER CONSIDERATIONS

7.1 "Work authorization" programs. ...

7.2 Operator's use of powered equipment. ...

7.3 Verification of established MAOP. ...

7.4 Planned rolling electric system blackouts or unplanned electric system outages.

Planned rolling electric system blackouts or unplanned electric system outages, large-scale or small-scale, might result in the interruption of gas service. To assist in responding to outages, operators ~~could~~ should consider the following.

- (a) Effects ~~to~~ on system and component function that could be contributing factors to abnormal operations.
- (b) Duration of the electric system outage due to the turn-on and turn-off process of gas restoration.
- (c) System configurations to maintain natural gas supply to critical system customer loads.
- (d) Auxiliary emergency backup systems.

Section 192.613

Note: Operators of Type A gathering lines are exempt from the requirements of §192.613(c) (see §192.9(c)). Although not required, operators Operators of Type B and Type C gathering lines are not required to comply with this section, but should consider including Type B and Type C gathering lines in continuing surveillance efforts.

1 GENERAL

Continuing surveillance should be conducted to identify any pipeline facilities experiencing abnormal or unusual operating and maintenance conditions. This may be accomplished by the following.

- (a) Periodic visual inspection of pipeline facilities to identify items such as the following.
 - (1) Changes in population densities.

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- (b) Periodic review and analysis of records, such as the following.

- (1) Patrols.
- (2) Leak surveys.
- (3) Valve inspections.
- (4) Vault inspections.
- (5) Pressure regulating, relieving, and limiting equipment inspections.
- (6) Corrosion control inspections.
- (7) Facility failure investigations.

~~(8) — Effects of planned rolling electrical system blackouts or other unplanned electric supply disruptions.~~

Section 192.631

1 GENERAL ...

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3 COMPONENTS OF CONTROL ROOM MANAGEMENT PROCEDURES

3.1 General. ...

3.2 Controller roles and responsibilities. ...

3.3 Communications.

Communication issues may also be addressed in management of change (MOC) and training in 6 and 7 below.

(a) Communication protocols.

Consideration should be given to the timeliness, type, and amount of information to be passed on to both internal and external entities, and designation of the person responsible for the communication. Internal entities may include other controllers, both on shift and between shifts, and other operator personnel outside of the control room environment such as field technicians, supervisors, and management. External entities may include suppliers, customers, local emergency personnel, electric providers operating within the gas system territory, the National Response Center (NRC), or regulatory agencies.

(b) Control room shift change communication.

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(c) Procedures should contain the following.

(1) A process to record shift changes between controllers, including names and times of changes. This can be a paper or electronic logbook, a SCADA system login, a checklist, or some other process.

(2) Information that is required to be passed on from the outgoing controller to the incoming controller, which might include the following.

(i) Ongoing emergencies or abnormal operations.

(ii) Upcoming pipeline operations that might occur during upcoming shifts.

(iii) Routine operating information, such as flow, linepack, and customer requirements.

(iv) Pipelines or facilities out of service, such as a storage field.

(v) Maintenance activities.

(vi) Pigging operations.

(vii) Unusual flow conditions, such as pipelines with reduced MAOPs or gas quality issues.

(viii) Weather-related events.

(ix) Alarms or conditions being investigated.

(x) Communication outages (e.g., no SCADA data) and manned locations.

(xi) Other unusual operations.

(xii) Planned rolling electric system blackouts or unplanned electric system outages.

(d) Other internal communications. ...

(e) External communications. ...

3.4 Manual pipeline operation. ...

4 SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEMS ...