• Required by Senate Bill 3

• Senate Bill 3 required the RRC to adopt rules no later than 6 months following the production of the Texas Electricity Supply Chain Security and Mapping Committee map

• The map was adopted early; therefore Rule 3.66 was adopted early
• Electricity Supply Chain Map was adopted on April 29, 2022
  – RRC had until October 29, 2022, to adopt weatherization rule
• Proposed on June 28, 2022
• Adopted on August 30, 2022
• Effective on September 19, 2022
• Facilities subject to the rule must implement rule requirements no later than December 1, 2022
(a) Applicability (1 of 3)

- Rule 3.66 applies to individual facilities
  - Gas Supply Chain Facilities; and
  - Gas Pipeline Facilities

- An operator under the RRC’s jurisdiction may have only a portion of its total facilities subject to Rule 3.66
Gas Supply Chain Facility

1. Included on the Electricity Supply Chain Map; and

2. Designated as critical in Rule 3.65 (relating to Critical Designation of Natural Gas Infrastructure)
Gas Pipeline Facility

1. Directly serves a natural gas electric generation facility operating solely to provide power to the electric grid for the Electric Reliability Council of Texas (ERCOT) power region or for the ERCOT power region and an adjacent power region; and

2. Included on the Electricity Supply Chain Map
• By December 1 of each year, an operator of a facility must implement weather emergency preparation measures intended to:

1. Ensure sustained operations during a weather emergency; and

2. Correct weather-related forced stoppages that prevented sustained operation due to previous weather emergencies
By December 1 of each year, an operator of a facility must implement weather emergency preparation measures intended to:

1. Ensure **sustained operations** during a weather emergency; and
2. Correct weather-related forced stoppages that prevented sustained operation due to previous weather emergencies
• Sustained Operations
  – Safe operation of a gas pipeline facility or a gas supply chain facility such that the facility does not experience a major weather-related forced stoppage or weather-related forced stoppage in production, treating, processing, storage, or transportation of natural gas.
By December 1 of each year, an operator of a facility must implement weather emergency preparation measures intended to:

1. Ensure sustained operations during a weather emergency; and
2. Correct weather-related forced stoppages that prevented sustained operation due to previous weather emergencies
• Weather Emergency

  – Weather conditions such as freezing temperatures, freezing precipitation, or extreme heat in the facility's county or counties that result in an energy emergency as defined by §3.65

  – A weather emergency does not include weather conditions that cannot be reasonably mitigated such as tornadoes, floods, or hurricanes
• Weather Emergency
  – Energy Emergency is defined in Rule 3.65 as a firm load shed event
  – Rule 3.65 is currently proposed for amendments, including amendments proposed to broaden the definition of “Energy Emergency”
    • Comments due October 7, 2022
By December 1 of each year, an operator of a facility must implement weather emergency preparation measures intended to:

1. Ensure sustained operations during a weather emergency; and

2. Correct weather-related forced stoppages that prevented sustained operation due to previous weather emergencies.
• Weather Related Forced Stoppage
  – An unanticipated and/or unplanned outage in the production, treating, processing, storage, or transportation of natural gas that is caused by weather conditions such as freezing temperatures, freezing precipitation, or extreme heat and occurs during a weather emergency
Major Weather-Related Forced Stoppage

- A weather-related forced stoppage that is the result of the deliberate disregard of this section or that results in:
  
  A. a loss of production exceeding 5,000 Mcf of natural gas per day per oil lease;
  B. a loss of production exceeding 5,000 Mcf of natural gas per day per gas well;
  C. a loss of gas processing capacity exceeding 200 MMcf per day;
  D. a loss of storage withdrawal capacity exceeding 200 MMcf per day; or
  E. a loss of transportation capacity exceeding 200 MMcf per day
• By December 1 of each year, an operator of a facility must implement weather emergency preparation measures intended to:

1. Ensure sustained operations during a weather emergency; and

2. Correct weather-related forced stoppages that prevented sustained operation due to previous weather emergencies
• Preparation Measures
  - Training relevant personnel on weather emergency preparation and operation
  - Consideration of the risk to the health and safety of employees
  - Consideration of protection of the environment
  - Weatherization of the facility
• Preparation Measures
  
  – **Weatherization** using methods a reasonably prudent operator would take given
    
    • the type of facility,
    • the age of the facility,
    • the facility's critical components,
    • the facility's location, and
    • weather data for the facility's county or counties such as data developed for the Commission by the state climatologist
Weatherization

- The iterative cycle of preparedness for sustained operation during weather emergencies that includes:

(A) correcting critical component failures that occurred during previous weather emergencies;

(B) installing equipment to mitigate weather-related operational risks; and

(C) internal inspection, self-assessment, and implementation of processes to identify, test, and protect critical components.
(d) Weather Readiness Attestation

• By December 1 of each year, an operator shall submit the Weather Emergency Readiness Attestation.

• Attestation must:
  – Meet certification/signatory requirements
  – Include an attachment describing all activities engaged in by the operator to implement the requirements of subsection (c) of this section, including a description of the weatherization methods utilized by the operator to weatherize each type of facility
(e) Inspections (1 of 2)

• RRC will inspect facilities to ensure compliance with Rule 3.66

• Will prioritize inspections of oil leases and gas wells producing greater than 5,000 Mcf per day of natural gas and facilities storing, processing, or transporting greater than 200 MMcf per day of natural gas

• Further prioritization in descending order in accordance with a facility’s production volume or storage, processing, or transportation capacity
(e) Inspections (2 of 2)

- Two types of inspections:
  - Inspections for preparedness based on Attestation
  - Weather Related-Forced Stoppages inspections
Operators of facilities subject to 3.66 must immediately notify the RRC through the Critical Infrastructure online portal of:

1. Weather-related forced stoppages that are not resolved within 24 hours
2. Forced stoppages due to loss of electric power that are not resolved within 24 hours
• Must call the RRC’s Critical Infrastructure telephone number within 1 hour of discovery:

1. Major weather-related forced stoppages
2. Major stoppages that are due to loss of electric power
• Repeated or major weather-related forced stoppages may result in the requirement for an operator to contract with a “qualified person” to assess the operator’s weather emergency preparedness

• Operator required to submit the qualified person’s written assessment and a corrective action plan
(g) Enforcement (1 of 3)

• Per Senate Bill 3, enforcement mechanisms are different depending on the type of facility

• However, enforcement for all types of facilities will utilize the same penalty classification table
(g) Enforcement (2 of 3)

• Gas Supply Chain Facilities
  – RRC will pursue administrative violations of the rule for adjudication only

  – After an order finding a violation of Rule 3.66 has been entered by RRC, RRC will refer violation to the Office of the Attorney General

  – Office of Attorney General will file suit for collection of penalties utilizing Rule 3.66’s penalty classification table
(g) Enforcement (3 of 3)

• Gas Pipeline Facilities
  – RRC has administrative penalty authority
  – RRC will adjudicate alleged violations
  – If violation order is issued, RRC will collect penalties utilizing Rule 3.66’s penalty classification table
Outages Dashboard

Reporting a Facility Outage
Effective December 1, 2022, critical infrastructure facilities are required to report weather-related and major weather-related forced stoppages to the RRC as per Senate Bill 3 (16 Texas Administrative Code §3.66) from the 87th Texas Legislative Regular Session.

The notification is only required if the weather-related forced stoppage occurs during a weather emergency.
Important Terminology (1 of 3)

Weather-related forced stoppage

• An unanticipated and/or unplanned outage in the production, treating, processing, storage, or transportation of natural gas that is caused by weather conditions such as freezing temperatures, freezing precipitation, or extreme heat and occurs during a weather emergency.
Important Terminology (2 of 3)

Major weather-related forced stoppage

• A weather related-forced stoppage during a weather emergency that is the result of the deliberate disregard of this section or that results in:
  – A loss of production exceeding 5,000 Mcf of natural gas per day per oil lease;
  – A loss of production exceeding 5,000 Mcf of natural gas per day per gas well;
  – A loss of gas processing capacity exceeding 200 MMcf per day;
  – A loss of storage withdrawal capacity exceeding 200 MMcf per day; or
  – A loss of transportation capacity exceeding 200 MMcf per day.
Weather emergency

- Weather conditions such as freezing temperatures, freezing precipitation, or extreme heat in the facility’s county or counties that result in an energy emergency as defined by §3.65 of this title. A weather emergency does not include weather conditions that cannot be reasonably mitigated, such as tornadoes, floods or hurricanes.
When to Take Action

Weather-related forced stoppage

• Notify the RRC using the Critical Infrastructure Division’s notification online portal (RRC Online CID system account) if the stoppage is not resolved within 24 hours of discovery.

Major weather-related forced stoppage

• Call the Critical Infrastructure Division’s 24-hour emergency line to notify the RRC of the stoppage within one hour of discovery of the stoppage.
• Then, submit online in the Critical Infrastructure Division’s notification portal. (RRC Online CID system account)

Important: You must return to complete the report once the outage has been resolved.
Outages Dashboard in the RRC Online System

- Log in to your RRC Online System account.
- User must have a SAD (Security Administrator Designation form)
- Click, “Critical Infrastructure Designation (CID/CIX).”
- Click, “Outages Dashboard” from the left-hand menu.

- The Outages Dashboard allows you to view, sort or edit outages you have reported. If you have not experienced/reported any outages, the Outage Dashboard will display, “No results found for search.”
To report an outage, click, “Report Facility Outage” on the left-hand menu.

This will take you to the “Report Outages Dashboard” where all your CID facilities are listed.
Reporting an Outage (2 of 2)

- Click the “Actions” button to the left of the Facility Id for which you need to report the outage/stoppage.
- Click, “Create Outage Report.”
- **Note:** If you have multiple facilities that have experienced an outage/stoppage that requires you to notify the RRC, you must submit separate outage reports for each facility.
Outage Information Page (1 of 6)

- Select your outage/stoppage reason from the drop-down menu.
- Indicate whether there is a third-party issue involved in the outage/stoppage.
- If so, provide a brief description.
Provide the date and time the outage/stoppage was discovered.

<table>
<thead>
<tr>
<th>Date Discovered:</th>
<th>Time Discovered (24h):</th>
</tr>
</thead>
</table>

Indicate whether this is a major weather-related forced stoppage. If yes, also indicated whether you have contacted the 24-hour emergency line.

<table>
<thead>
<tr>
<th>Was this a major weather related forced stoppage?</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Weather Event stoppage, have you contacted the 24 hour hotline?</td>
<td>Yes</td>
</tr>
</tbody>
</table>
• Indicate whether natural gas has been affected and specify the volume of natural gas that has been lost.
• Provide the following:
  – Anticipated Recovery Time
  – Resolution Date
  – Resolution time

<table>
<thead>
<tr>
<th>Date Discovered:</th>
<th>Time Discovered (24h):</th>
<th>Was this a major weather related forced stoppage?</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Anticipated Recovery Time (Hours) | Resolution Date? | Resolution Time (24h)?
---------------------------------|------------------|------------------
Select the facility type and provide a brief description of the cause of the stoppage/outage.

Use the text box to provide a description of your recovery plan.

Note: The “Latitude” and “Longitude” fields will automatically populate the facility’s coordinates and cannot be edited.
• Upload any supporting documents you would like to submit with your outage report.
• Click “Save and Exit.”
• Note: The “Inspection # generated” field is for RRC internal use.

**Important:** you must return to complete the report once the outage has been resolved.
The portal for attestation submissions will open on November 1, 2022. Once this becomes available, operators will have to request access to the WE PREP application through the RRC Access Management Process (RAMP) via the Security Administrator Form.

- RAMP Information: https://www.rrc.texas.gov/forms/ramp-information/
- Security Administrator Form Link: https://myaccess.texas.gov/rrc/#/safe
- RAMP Dashboard Link: https://www.rrc.texas.gov/apps/rrc-ramp/

Once the access request is processed, operators will be able to access the WE PREP application through the RAMP Dashboard.

After logging in, the operator will select “Upload Attestation” located under the WE PREP application. This will be the only option under the WE PREP application at that time.
To upload an attestation form, first go to the following website: RAMP Dashboard Link: https://www.rrc.texas.gov/apps/rrc-ramp/
  - Select Ramp Dashboard
• When you register with RRC you will get a User Name and Password, use this User Name and Password as your login credentials to sign in.
• Your name will appear at the top of the page to let you know that you are logged in as an authenticated user
• Click “Upload Attestation”
- You will be taken to your Organization Page
- Click the “Upload Attestation” button at the top
• Fill out the “Covered Year” field
• Fill out any other information that is not already populated on the upload screen
• Click “Next”
• Click “Browse your device” to select your attestation form or drag and drop your file into the upload area

• Click “Upload”
You have now successfully uploaded your Attestation Form for the year!
• To view your uploaded form, click the “Related” tab and select the record you uploaded in the Files & Correspondence related list.
Inspection Process – CID Regional Directors

Gilbert Herrera, Andrea Meyer, Jarrod Eberly, Jim Collins

October 2022
Inspection Process Agenda

- Introductions
- What's happening now?
  i. Site Verifications
- What will be the inspection process?
  i. Who is going to be inspected?
  ii. Causes for inspection
  iii. Weather emergency and notification
  iv. Readiness Attestation
  v. Common methods
Introductions

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Director

Mysti Doshier
Asst Director

Gilbert Herrera
East Director

Andrea Meyer
South Director

Jarrod Eberly
West Director

Jim Collins
North Director
<table>
<thead>
<tr>
<th>Name</th>
<th>Region</th>
<th>Email</th>
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</tr>
</tbody>
</table>
WHAT'S HAPPENING NOW?
Compressor Stations
- Confirm facility and operator information
- Confirm GPS

Gas Processing Facilities
- Confirm facility and operator information
- Confirm GPS

This may lead to other facilities being verified
• We are contacting operators to schedule meetings at the location.
• This helps us verify the location GPS that was provided and the facility name.
• We are making sure that the information that we have is accurate to make it easier for the operators and our inspectors.
Site Verifications (3 of 3)

- Site verification visits are NOT an inspection
- No photos will be taken inside facilities
- All midstream facility visits **must** be coordinated with operators and our inspectors need to be accompanied by operator personnel
- For upstream facilities, it is **preferred but not required** that inspectors be accompanied by lease personnel.
- Appropriate time will be given to operators to respond and schedule these visits
What will be the inspection process?
3.66 Applicability

Facilities required to comply with 3.66

Gas supply chain facility
- Designated critical by 3.65
- On the electricity supply chain map

Gas pipeline facility
- Directly serves a natural gas electric generation facility
  - Facility provides power to the electric grid
- On the electricity supply chain map
Inspection Process

An inspection will originate from one of two places.

- A regular inspection conducted in accordance with the Commission’s inspection schedule
  - Any facility required to comply with 3.66

- An inspection scheduled in response to a weather-related stoppage notification
  - Any facility required to comply with 3.66
Inspection Schedule

**Before Dec 1**
- Scheduled Visits
- Site Verifications

**After Dec 1**
- Readiness Attestation
- Inspect facilities who submit attestation

**During weather emergency**
- Notification of forced weather-related stoppage
- Inspection from notification
Weather Emergency Readiness (1 of 2)

Attestation – December 1 each year

- Confirmation that **weather emergency** preparation measures were implemented
  - Training on weather emergency preparation and operations
  - Consideration of the risk and protection to HSE
  - Weatherization of facilities
    - Critical components are listed and weatherization protection for the components is described
    - Describe corrective actions taken to mitigate known weather-related forced stoppages
      - Due to previous weather emergencies
Attestation will also confirm the following

- Confirmation that information and statements are true, correct, and complete
- Confirmation of responsibility and authorization
Attestation (1 of 2)

Preparation measures of critical facility components

Corrective measures taken to mitigate previous stoppages

Weather Emergency Readiness Attestation
RRC inspectors will use this information when inspecting facilities subject to §3.66

Inspector should be able to identify which weatherization methods apply to which facility

One attestation may be submitted per operator

- Facilities may be grouped together
  - Similar weatherization measures were implemented

- An operator may also list individual facilities
  - Specific weatherization techniques for a facility differ from general techniques of that type of facility for the operator
Weather Emergency – weather conditions that result in an Energy Emergency

- Freezing Temperatures
- Extreme Heat
- Freezing precipitation
- Does not include certain storms
Energy Emergency – ERCOT has issued an EEA 1 or higher

- **Alert Level 1**
  - Potential to result in firm load shed

- **Alert Level 2**
  - Potential to result in firm load shed

- **Alert Level 3**
  - Firm load shed
First concern in a weather emergency

- The safety of employees

Safe operation in “sustained operation”
By December 1\textsuperscript{st} of each year, implement weather emergency preparation measures

- Ensure the sustained operation of a gas supply chain facility or a gas pipeline facility during a weather emergency

- Correct known weather-related forced stoppages that prevented sustained operation due to previous weather emergencies
Required weather emergency preparation measures:

- Consideration of the risk to the health and safety of employees and protection of the environment.
- Providing training on weather emergency preparations and operations to relevant operational personnel
- Weatherization of the facility
Weather Emergency Preparedness (4 of 5)

- **Weatherization includes:**
  - Correcting critical component failures
  - Installing equipment to mitigate weather-related operational risks
  - Implementation of processes to identify, test, and protect critical components.
Weatherization of the facility shall be based on:

- The type of facility
- Facility’s critical components
- Facility’s location
- Facility’s age
- Weather data (facility’s county or counties)
Weatherization Methods (1 of 2)

Some facility observations that inspectors may look for:

- Onsite fuel/spare parts
- Wind breaks or temporary enclosures
- Enclosing sensors
- Thermal insulation/heat tracing devices
- Monitoring devices for cold weather critical components
Weatherization Methods (2 of 2)

- Chemical injection systems (lower freeze point)
- Equipment to remove, store, or dispose of liquids susceptible to freezing
- Nitrogen in closed loop systems – instrument controls
- Availability and inventory of road/ground material
- Procurement of necessary third-party services
- Operating procedures during extreme weather conditions
Weatherization of Critical Components

A few common weatherization methods that we can visually see are:

- Methanol injection/drip
- Water removal – solid absorption
- Thermal insulation
- Wind breaks
- Heating devices
- Glycol unit
- Drip pots
Dead legs – sections of piping where fluid flow is stagnant

**Permanent**
- Part of original design
- Could be due to a modification

**Operational**
- On/Off
- Spare Pump, pass line, relief valve (in/out)
- Start Up/Shut Down operations

**Temporary**
- Equipment temporarily removed
- Deactivation
- Storing
- Preservation
Dead Legs (2 of 3)

1. Identify dead legs
   - Database of dead legs

2. Prioritize dead legs
   - Flush and test operation of dead legs

3. Routine inspection (physical condition)
   - Routine testing
Dead Legs (3 of 3)

Attestation

- Is dead leg a critical component, if so, how is it weatherized?
- Corrective actions to mitigate previous failure

Forced Stoppage

- Fix critical component
- Add to attestation
Capture and remove from pipe

Drains at a low point within the gas gathering system
Low Point Drains (2 of 2)

**Attestation**
- Is drain critical component, or weatherized method?
- Is this a way to implement a corrective action to mitigate a previous failure?

**Forced Stoppage**
- Did drain fail or is drain used to fix critical component?
- Add to attestation.
Gas supply chain facility or gas pipeline facility

- If a facility experiences a weather-related forced stoppage in sustained operations during a weather emergency
  - Notify the Commission of the stoppage if the stoppage is not resolved within 24 hours of discovery
  - Only required if stoppage occurs during a weather emergency
A facility is a gas supply chain facility or a gas pipeline facility regulated under 3.66.

- Production
- Treating
- Processing
- Storage
- Transportation
Violation of 3.66 - Stoppage

Was the related forced stoppage due to the operator’s failure to implement measures to prepare to operate in a weather emergency?

• **No** – weather-related forced stoppage was unrelated to the requirements of 3.66 – no violation will be issued
  • Inspection of facility

• **Yes** – measures to prepare to operate in a weather emergency as specified in 3.66 were not implemented – possible violation

We will not require a facility to operate. But require an operator to implement measures to prepare to operate in a weather emergency.
Major and Repeated Stoppage (1 of 2)

Major weather-related forced stoppage:
A weather-related forced stoppage during a weather emergency that is the result of the deliberate disregard of this section or that results in:

- (A) a loss of production exceeding 5,000 Mcf of natural gas per day per oil lease;
- (B) a loss of production exceeding 5,000 Mcf of natural gas per day per gas well;
- (C) a loss of gas processing capacity exceeding 200 MMcf per day;
- (D) a loss of storage withdrawal capacity exceeding 200 MMcf per day; or
- (E) a loss of transportation capacity exceeding 200 MMcf per day.
Repeated weather-related forced stoppage

- More than one weather-related forced stoppage violation within a 12-month period
If there is a violation of 3.66 and the violation is not remedied with a reasonable amount of time

• The Commission is required to notify the Office of the Attorney General of Texas
Classification system for the range of penalties

- Factors include nature, circumstances, extent, and gravity of a prohibited act; the hazard or potential hazard created to the public’s health, safety, or economic welfare; the history of previous violations; the amount necessary to deter future violations; and efforts to correct the violation.

- Factor value depends on the amount of natural gas impacted by the violation
  - Class A violation is the highest class of violations and is eligible for a penalty of $5,000 to $1,000,000.
  - Class B up to $5,000, Class C up to $4,000, Class D up to $3,000
  - Points range for each class can be found in 3.66
Conclusions

Now to December 1 – Site verifications/Site observations

December 1 – Inspections related to operator attestations

Forced Stoppage – Inspect facility once RRC is notified of forced stoppage

• Weather-related forced stoppage
• Major weather-related forced stoppage
• Repeated weather-related forced stoppage