

of Transportation

Pipeline and Hazardous

Materials Safety

Administration

2023 Gas State Program Evaluation

for

NORTH CAROLINA UTILITIES COMMISSION

Document Legend PART:

- O -- Representative, Dates and Title Information
- A -- Progress Report and Program Documentation Review
- B -- Program Inspection Procedures
- C -- State Qualifications
- D -- Program Performance
- E -- Field Inspections
- F -- Damage prevention and Annual report analysis



2023 Gas State Program Evaluation -- CY 2023 Gas

State Agency: North Carolina Rating:

Agency Status: 60105(a): Yes **60106(a):** No Interstate Agent: No

Date of Visit: 03/25/2024 - 03/28/2024 **Agency Representative:** Steve Wood

Director, Pipeline Safety

PHMSA Representative: Clint Stephens

State Liaison

Commission Chairman to whom follow up letter is to be sent:

Name/Title: Ms. Charlotte A. Mitchell, Chair North Carolina Utilities Commission Agency: **Address:** 430 North Salisbury Street, Dobbs Bldg

City/State/Zip: Raleigh, North Carolina 27603

INSTRUCTIONS:

Complete this evaluation in accordance with the Evaluator Guidance for conducting state pipeline safety program evaluations. The evaluation should generally reflect state program performance during CY 2023 (not the status of performance at the time of the evaluation). A deficiency in any one part of a multiple-part question should be scored as "Needs Improvement." Determine the answer to the question then select the appropriate point value. If a state receives less than the maximum points, include a brief explanation in the appropriate notes/comments section. If a question is not applicable to a state, select NA. Please ensure all responses are COMPLETE and ACCURATE, and they OBJECTIVELY reflect the state's program performance for the question being evaluated. Increasing emphasis is being placed on how the state pipeline safety programs conduct and execute their pipeline safety responsibilities (their performance). This evaluation, together with selected factors reported in the state's annual progress report attachments, provide the basis for determining the state's pipeline safety grant allocation.

Scoring Summary

PARTS		Possible Points	Points Scored
A	Progress Report and Program Documentation Review	0	0
В	Program Inspection Procedures	15	15
C	State Qualifications	10	10
D	Program Performance	50	41.5
E	Field Inspections	15	15
F	Damage prevention and Annual report analysis	10	5
TOTALS 100		86.5	
State Rating			86.5



PART A - Progress Report and Program Documentation Review

Points(MAX) Score

Were the following Progress Report Items accurate? (*items not scored on progress report)

Info Only Info Only

- Info Only = No Points
 - a. Stats On Operators Data Progress Report Attachment 1
 - b. State Inspection Activity Data Progress Report Attachment 2
 - c. List of Operators Data Progress Report Attachment 3*
 - d. Incidents/Accidents Data Progress Report Attachment 4*
 - e. Stats of Compliance Actions Data Progress Report Attachment 5*
 - f. List of Records Kept Data Progress Report Attachment 6 *
 - g. Staff and TQ Training Data Progress Report Attachment 7
 - h. Compliance with Federal Regulations Data Progress Report Attachment 8
 - i. Performance and Damage Prevention Question Data Progress Report

Attachment 10*

Evaluator Notes:

No issues.

Total points scored for this section: 0 Total possible points for this section: 0



Do written procedures address pre-inspection, inspection and post inspection activities

5

5

	for each of the following inspection types: Chapter 5.1				
	Yes = 5 No = 0 Needs Improvement = 1-4 Standard Improvement = 1-4 Charles Improvement = 1-4 Charles Improvement = 1-4 Charles Improvement = 1-4				
	 Standard Inspections, which include Drug/Alcohol, CRM and Public Awareness Effectiveness Inspections 				
	b. TIMP and DIMP Inspections (reviewing largest operator(s) plans annually)				
	c. OQ Inspections				
	d. Damage Prevention Inspections				
	e. On-Site Operator Training				
	f. Construction Inspections (annual efforts)				
	g. LNG Inspections				
Evaluato					
	issues.				
2	Do written procedures address inspection priorities of each operator, and if necessary each unit, based on the following elements and time frames established in its procedures?	4	4		
	Chapter 5.1				
	Yes = 4 No = 0 Needs Improvement = 1-3				
	a. Length of time since last inspection				
	b. Operating history of operator/unit and/or location (includes leakage, incident				
	and compliance activities)				
	c. Type of activity being undertaken by operators (i.e. construction)				
	d. Locations of operator's inspection units being inspected - (HCA's, Geographic				
	area, Population Centers, etc.) e. Process to identify high-risk inspection units that includes all threats -				
	(Excavation Damage, Corrosion, Natural Forces, Outside Forces, Material and Welds,				
	Equipment, Operators and any Other Factors)				
	f. Are inspection units broken down appropriately?				
Evaluato	* * * * *				
No i	issues.				
3	(Compliance Procedures) Does the state have written procedures to identify steps to be	3	3		
	taken from the discovery to resolution of a probable violation? Chapter 5.1				
	Yes = 3 No = 0 Needs Improvement = 1-2 a. Procedures to notify an operator (company officer) when a noncompliance is				
	a. Procedures to notify an operator (company officer) when a noncompliance is identified				
	b. Procedures to routinely review progress of compliance actions to prevent				
	delays or breakdowns				
	c. Procedures regarding closing outstanding probable violations				
Evaluato	or Notes:				
No i	issues.				
4	(Incident/Accident Investigations) Does the state have written procedures to address state	3	3		
7	actions in the event of an incident/accident?	3	3		
	Yes = 3 No = 0 Needs Improvement = 1-2				
	a. Mechanism to receive, record, and respond to operator reports of incidents,				
	including after-hours reports				
	b. If onsite investigation was not made, do procedures require on-call staff to				
	obtain sufficient information to determine the facts to support the decision not to go				



Evaluator Notes: No issues.

on-site.

5 General Comments: Info Only = No Points

Evaluator Notes:

No issues identified in Part B of program evaluation.

Total points scored for this section: 15 Total possible points for this section: 15



5

Total points scored for this section: 10 Total possible points for this section: 10



8

Did state inspect all types of operators and inspection units in accordance with time intervals established in written procedures? Chapter 5.1

5 3

- Yes = 5 No = 0 Needs Improvement = 1-4
 - a. Standard (General Code Compliance)
 - b. Public Awareness Effectiveness Reviews
 - c. Drug and Alcohol
 - d. Control Room Management
 - e. Part 193 LNG Inspections
 - f. Construction (did state achieve 20% of total inspection person-days?)
 - g. OQ (see Question 3 for additional requirements)
 - h. IMP/DIMP (see Question 4 for additional requirements)

Evaluator Notes:

North Carolina Utility Commission (NCUC) did not meet the five-year DIMP inspection interval for City of Rocky Mount Municipal System and Piedmont Natural Gas Company, Inc.

Did inspection form(s) cover all applicable code requirements addressed on Federal Inspection form(s)? Did State complete all applicable portions of inspection forms? Chapter 5.1. Do inspection records indicate that adequate reviews of procedures, records and field activities, including notes and the appropriate level of inspection person-days for each inspection, were performed?

Yes = 10 No = 0 Needs Improvement = 1-9

- a. Standard (General Code Compliance)
- b. Public Awareness Effectiveness Reviews
- c. Drug and Alcohol
- d. Control Room Management
- e. Part 193 LNG Inspections
- f. Construction
- g. OQ (see Question 3 for additional requirements)
- h. IMP/DIMP (see Question 4 for additional requirements)

Evaluator Notes:

NCUC did not document non-applicable (N/A) designations in their standard inspection checklists for PNG Burlington, PNG Goldsboro Operations Center, Dominion Energy (PAP), and Greenville LNG.

3 Is state verifying monitoring (Protocol 9/Form15) of operators OQ programs? This should include verification of any plan updates and that persons performing covered tasks (including contractors) are properly qualified and requalified at intervals established in the operator's plan. 49 CFR 192 Part N

2

2

2

Yes = 2 No = 0 Needs Improvement = 1

Evaluator Notes:

No issues.

4 Is state verifying operator's integrity management Programs (IMP and DIMP)? This should include a review of plans, along with monitoring progress. In addition, the review should take in to account program review and updates of operator's plan(s). 49 CFR 192 Subparts O and P

2

Yes = 2 No = 0 Needs Improvement = 1

- a. Are the implementation plans of the state's large/largest operators(s) being reviewed annually to ensure they are completing full cycle of the IMP process?
- b. Are states verifying with operators any plastic pipe and components that have shown a record of defects/leaks and mitigating those through DIMP plan?
- c. Are the states verifying operators are including low pressure distribution systems in their threat analysis?

Evaluator Notes:

5 Did the state review the following (these items are NTSB recommendations to PHMSA that have been deemed acceptable response based on PHMSA reviewing these items during the evaluation process): Chapter 5.1

Yes = 2 No = 0 Needs Improvement = 1

- Operator procedures for determining if exposed cast iron pipe was examined for evidence of graphitization and if necessary remedial action was taken;
- Operator procedures for surveillance of cast iron pipelines, including appropriate action resulting from tracking circumferential cracking failures, study of leakage history, or other unusual operating maintenance condition? (Note: See GPTC Appendix G-18 for guidance);
- Operator emergency response procedures for leaks caused by excavation damage near buildings and determine whether the procedures adequately address the possibility of multiple leaks and underground migration of gas into nearby buildings Refer to 4/12/01 letter from PHMSA in response to NTSB recommendation P-00-20 and P-00-21:
- Operator records of previous accidents and failures including reported thirdparty damage and leak response to ensure appropriate operator response as required
- Directional drilling/boring procedures of each pipeline operator or its contractor to determine if they include actions to protect their facilities from the dangers posed by drilling and other trench less technologies;
- Operator procedures for considering low pressure distribution systems in threat analysis?
- Operator compliance with state and federal regulations for regulators located inside buildings?

Evaluator Notes:

NCUC did not have documentation to support communication with operators on NTSB recommendations pertaining to operator response to third party damage and leak response required by 192.617; procedures for protecting facilities from directional drilling/boring; operator procedures for low pressure distribution systems in threat analysis; and operator compliance for regulators located inside buildings.

Did the State verify Operators took appropriate action regarding advisory bulletins issued since the last evaluation? (Advisory Bulletins Current Year)

10

1

10

2

1

Yes = 1 No = 0 Needs Improvement = .5

Evaluator Notes:

No issues.

7 (Compliance Activities) Did the state follow compliance procedures (from discovery to resolution) and adequately document all probable violations, including what resolution or further course of action is needed to gain compliance? Chapter 5.1

Yes = 10 No = 0 Needs Improvement = 1-9

- Were compliance actions sent to company officer or manager/board member if municipal/government system?
- Were probable violations documented properly? b.
- Resolve probable violations c.
- d. Routinely review progress of probable violations
- Did state issue compliance actions for all probable violations discovered? e.
- f. Can state demonstrate fining authority for pipeline safety violations?
- Does Program Manager review, approve and monitor all compliance actions? g. (note: Program Manager or Senior Official should sign any NOPV or related enforcement action)
- Did state compliance actions give reasonable due process to all parties? Including "show cause" hearing, if necessary.
- Within 30 days, conduct a post-inspection briefing with the owner or operator outlining any concerns

j. Within 90 days, to the extent practicable, provide the owner or operator with written preliminary findings of the inspection. (Incident investigations do not need to meet 30/90-day requirement)

Evaluator Notes:

No issues.

8 (Incident Investigations) Were all federally reportable incidents investigated, thoroughly documented, with conclusions and recommendations?

Yes = 10 No = 0 Needs Improvement = 1-9

- a. Does state have adequate mechanism to receive and respond to operator reports of incidents, including after-hours reports?
- b. Did state keep adequate records of Incident/Accident notifications received?
- c. If onsite investigation was not made, did the state obtain sufficient information from the operator and/or by means to determine the facts to support the decision not to go on site?
- d. Were onsite observations documented?
- e. Were contributing factors documented?
- f. Were recommendations to prevent recurrences, where appropriate, documented?
- g. Did state initiate compliance action for any violations found during any incident/accident investigation?
- h. Did state assist Region Office or Accident Investigation Division (AID) by taking appropriate follow-up actions related to the operator incident reports to ensure accuracy and final report has been received by PHMSA?
- i. Does state share any lessons learned from incidents/accidents?

Evaluator Notes:

NCUC had eight NRC reportable incidents in CY2023. It was stated that all the incidents were investigated by NCUC; however, the state could not provide onsite observation documentation for any of the incidents. In addition, based on operator findings from the Piedmont Natural Gas incident, dated 10/11/2023 where the company locator mismarked a 12" transmission pipeline; the state did not document any recommendations to prevent recurrence.

9 Did state respond to Chairman's letter on previous evaluation within 60 days and correct or address any noted deficiencies? (If necessary) Chapter 8.1

1

7

Yes = 1 No = 0 Needs Improvement = .5

Evaluator Notes:

No issues.

Did State conduct or participate in pipeline safety training session or seminar in Past 3 Info Only Info Only Years? Chapter 8.5

Info Only = No Points

Evaluator Notes:

No issues.

Has state confirmed transmission operators have submitted information into NPMS Info Only Info Only database along with changes made after original submission?

Info Only = No Points

Evaluator Notes:

NCUC could not show documentation that confirmed transmission operators had submitted information into NPMS database along with changes made after original submission.

Does the state have a mechanism for communicating with stakeholders - other than state pipeline safety seminar? (This should include making enforcement cases available to public).

Yes = 1 No = 0 Needs Improvement = .5

Evaluator Notes:

No issues.

1

	Yes = 1 No = 0 Needs Improvement = .5		
Evaluator			
No 1	ssues.		
		_	
14	Was the State responsive to:	1	0.5
	Yes = 1 No = 0 Needs Improvement = .5		
	a. Surveys or information requests from NAPSR or PHMSA; and		
	b. PHMSA Work Management system tasks?		
Evaluato			
	RC report for Public Service Co. of North Carolina in CY2023, NCUC failed to create initial	ıl note with	ıın 10 days ın
WM	5.		
15	If the State has issued any waivers/special permits for any operator, has the state verified conditions of those waivers/special permits are being met? This should include having the operator amend procedures where appropriate. Yes = 1 No = 0 Needs Improvement = .5		1
Evaluato			
No is	ssues.		
16	Were pipeline program files well-organized and accessible?	Info Only	Info Only
	Info Only = No Points		
Evaluato			
	ram Manager had a difficult time locating some of the pipeline safety records during the pr	ogram eval	uation. Files coul
be be	etter organized for accessibility.		
17	Discussion with State on accuracy of inspection day information submitted into State Inspection Day Calculation Tool (SICT). Has the state updated SICT data? Yes = 3 No = 0 Needs Improvement = 1-2	3	3
Evaluato			
	ssues.		
	ssucs.		
18	Discussion on State Program Performance Metrics found on Stakeholder Communication site.\ http://primis.phmsa.dot.gov/comm/states.htm?nocache=4805 Info Only = No Points	n Info Only	Info Only
Evaluato			
No is	ssues.		
19	Did the state encourage and promote operator implementation of Pipeline Safety	Info Only	Info Only
	Management Systems (PSMS), or API RP 1173? This holistic approach to improving		
	pipeline safety includes the identification, prevention and remediation of safety hazards.		
	Info Only = No Points		
	a. https://pipelinesms.org/		
F1 - 4	b. Reference AGA recommendation to members May 20, 2019		
Evaluato			
No is	ssues.		
20		IC. O. 1	Jufa O 1a
20	General Comments:	into Only	Info Only

Did state execute appropriate follow-up actions to Safety Related Condition (SRC)

DUNS: 780414723 2023 Gas State Program Evaluation

Evaluator Notes:

Info Only = No Points

The following issues were identified in Part D of the program evaluation:

13

Reports? Chapter 6.7

1

1

- 1) NCUC did meet inspection intervals;
- 2) N/A not documented in some inspection reports;
- 3) Not all NTSB recommendations were communicated to operator;
- 4) Incident investigations not documented;
- 5) Operator submissions in NPMS not confirmed;
- 6) Work Management System tasks not completed; and
- 7) Files not well-organized.

Total points scored for this section: 41.5 Total possible points for this section: 50



1	Operator, Inspector, Location, Date and PHMSA Representative (enter specifics into the Info Only Info Only
	comments box below)

Info Only = No Points

- What type of inspection(s) did the state inspector conduct during the field portion of the state evaluation? (i.e. Standard, Construction, IMP, etc)
- When was the unit inspected last?
- c. Was pipeline operator or representative present during inspection?
- d. Effort should be made to observe newest state inspector with least experience

Evaluator Notes:

Operator: Public Service Co. of North Carolina (North Durham) Inspector(s): Hilary King (L), Ryan Duffy, Matt Dillehay, Steve Wood

Location: Durham, NC

Date: 3/27/24

Type: Regulator Station inspections PHMSA Rep.: Clint Stephens

2 Did the inspector use an appropriate inspection form/checklist and was the form/checklist used as a guide for the inspection? (New regulations shall be incorporated)

2

2

Yes = 2 No = 0 Needs Improvement = 1

No issues.

3 Did the inspector adequately review the following during the inspection 10 10

Yes = 10 No = 0 Needs Improvement = 1-9

- Procedures (were the inspector's questions of the operator adequate to determine compliance?)
- Records (did the inspector adequately review trends and ask in-depth b. questions?)
- Field Activities/Facilities (did inspector ensure that procedures were being followed, including ensuring that properly calibrated equipment was used and OQ's were acceptable?)
- Other (please comment) d.
- e. Was the inspection of adequate length to properly perform the inspection?

Evaluator Notes:

No issues.

From your observation did the inspector have adequate knowledge of the pipeline safety 4 program and regulations? (Evaluator will document reasons if unacceptable)

2

2

1

Yes = 2 No = 0 Needs Improvement = 1

Evaluator Notes:

No issues.

5 Did the inspector conduct an exit interview, including identifying probable violations? (If inspection is not totally completed the interview should be based on areas covered during time of field evaluation)

1

Yes = 1 No = 0 Needs Improvement = .5

Evaluator Notes:

No issues.

6 Was inspection performed in a safe, positive, and constructive manner? Info Only = No Points

Info Only Info Only

- a. No unsafe acts should be performed during inspection by the state inspector
- b. What did the inspector observe in the field? (Narrative description of field observations and how inspector performed)
- c. Best Practices to Share with Other States (Field could be from operator visited or state inspector practices)
- d. Other

Evaluator Notes:

No issues.

7 General Comments:

Info Only Info Only

Info Only = No Points
Evaluator Notes:

No issues identified in Part E of program evaluation.

Total points scored for this section: 15 Total possible points for this section: 15



1

- Has the state reviewed Operator Annual reports, along with Incident/Accident reports, for accuracy and analyzed data for trends and operator issues.
 - Yes = 2 No = 0 Needs Improvement = 1

Evaluator Notes:

NCUC provided operator excavation damage data from 2010 to 2023 and graphs with data from 2015 to 2023. The state did not provide records that showed data being analyzed for trends in CY2023.

- Has the state verified that the operators analyze excavation damages for the purpose of determining root causes and minimizing the possibility of a recurrence? (192.617)

 Has the state verified that the operators have appropriately identified excavators who have repeatedly violated one-call laws and damaged their facilities. Have the operators taken steps to mitigate that risks? (192.1007)
- 2

Yes = 2 No = 0 Needs Improvement = 1

Evaluator Notes:

NCUC had verified that the operators analyze excavation damages for the purpose of determining root causes and minimizing the possibility of a recurrence through CY2022; however, the state could not provide documentation which verified operators had appropriately identified excavators who repeatedly violated one-call laws and damaged their facilities in CY2023.

3 Has the state reviewed the operator's annual report pertaining to Part D - Excavation Damage?

2

4

Yes = 4 No = 0 Needs Improvement = 1-3

- a. Is the information complete and accurate with root cause numbers?
- b. Has the state evaluated the causes for the damages listed under "One-Call Notification Practices Not Sufficient" (Part D.1.a.)?
- c. Has the state evaluated the causes for the damages listed under "Locating Practices Not Sufficient" (Part D.1.b)? For each operator, does the state review the following?
- d. Is the operator or its locating contractor(s) qualified and following written procedures for locating and marking facilities?
- e. Is the operator appropriately requalifying locators to address performance deficiencies?
- f. What is the number of damages resulting from mismarks?
- g. What is the number of damages resulting from not locating within time requirements (no-shows)?
- h. Is the operator appropriately addressing discovered mapping errors resulting in excavation damages?
- i. Are mapping corrections timely and according to written procedures?
- j. Has the state evaluated the causes for the damages listed under "Excavation

Practices Not Sufficient" (Part D.1.c.)?

Evaluator Notes:

The NCUC had reviewed the operator's annual report pertaining to Part D? Excavation Damage in CY2022, but the state could not provide records that showed an in-depth review of excavation damages based on the locator qualification; the number of damages as a result from mismarks; the number of damages resulting from not locating within time requirements; and mapping errors resulting in excavation damages for CY2023.

4 Has the agency or another organization within the state collected data and evaluated trends on the number of pipeline damages per 1,000 locate requests?

1

2

- Yes = 2 No = 0 Needs Improvement = 1
 - a. What stakeholder group is causing the highest number of damages to the pipelines? Operator, contractor, locating company or public.
 - b. Has the state verified the operator is appropriately focusing damage prevention education and training to stakeholders causing the most damages?

- c. Has the state evaluated which of the following best describes the reason for the excavation damages; i.e., operator or contractor not following written procedures, failure to maintain marks, failure to support exposed facilities, failure to use hand tools were required, failure to test-hole (pot hole), improper backfilling practices, failure to maintain clearance or insufficient excavation practices.
- Has the state verified the operator is appropriately focusing damage prevention education and training to address the causes of excavation damages?

Evaluator Notes:

NCUC provide documentation to verify their agency or another organization within the state has collected dated and evaluated trends on the number of pipeline damages per 1,000 locate requests for the CY2023, but did not provide records to show which stakeholder groups caused the highest number of damages to the pipelines; operator appropriately focusing damage prevention education and training to stakeholders causing the most damages; in-depth analysis determining the reason for the excavation damages; and the operator is appropriately focusing damage prevention education and training to address the causes of excavation damages.

5 General Comments:

Info Only Info Only

Info Only = No Points

Evaluator Notes:

NCUC had the following issues identified in Part E of the program evaluation:

- 1) The state did not provide records that showed data being analyzed for trends;
- 2) The state could not provide documentation which verified operators had appropriately identified excavators who repeatedly violated one-call laws and damaged their facilities;
- 3) The state could not provide records that showed an in-depth review of excavation damages based on the locator qualification; the number of damages as a result from mismarks; the number of damages resulting from not locating within time requirements; and mapping errors resulting in excavation damages; and
- 4) The state did not provide records to show which stakeholder groups caused the highest number of damages to the pipelines; operator appropriately focusing damage prevention education and training to stakeholders causing the most damages; in-depth analysis determining the reason for the excavation damages; and the operator is appropriately focusing damage prevention education and training to address the causes of excavation damages.

Total points scored for this section: 5 Total possible points for this section: 10