U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration

## 2016 Gas State Program Evaluation

for

## NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

## Document Legend PART:

- O -- Representative Date and Title Information
- A -- Progress Report and Program Documentation Review
- B -- Program Inspection Procedures
- C -- Program Performance
- D -- Compliance Activities
- E -- Incident Investigations
- F -- Damage Prevention
- G -- Field Inspections
- H -- Interstate Agent State (If Applicable)
- I -- 60106 Agreement State (If Applicable)



# 2016 Gas State Program Evaluation -- CY 2016 Gas

State Agency: New Hampshire Rating:

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

**Date of Visit:** 06/27/2017 - 06/29/2017

**Agency Representative:** Randy Knepper, Director, Safety Division

PHMSA Representative: Jim Anderson

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

Name/Title: Martin P. Honigberg, Chairman

**Agency:** New Hampshire public Utilities Commission

**Address:** 21 S. Fruit Street, Suite 10

City/State/Zip: Concord, New Hampshire 03301-2429

### **INSTRUCTIONS:**

Complete this evaluation in accordance with the Procedures for Evaluating State Pipeline Safety Program. The evaluation should generally reflect state program performance during CY 2016 (not the status of performance at the time of the evaluation). All items for which criteria have not been established should be answered based on the PHMSA representative's judgment. 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 then the maximum points, include a brief explanation in the space provided for general comments/regional observations. If a question is not applicable to a state, select NA. Please ensure all responses are COMPLETE and ACCURATE, and OBJECTIVELY reflect state program performance. Increasing emphasis is being placed on 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.

## Field Inspection (PART G):

The field inspection form used will allow different areas of emphasis to be considered for each question. Question 13 is provided for scoring field observation areas. In completing PART G, the PHMSA representative should include a written summary which thoroughly documents the inspection.

#### **Scoring Summary**

, PAKTS		Possible Points	Points Scored
A	Progress Report and Program Documentation Review	10	9.5
В	Program Inspection Procedures	13	13
С	Program Performance	48	48
D	Compliance Activities	15	15
Е	Incident Investigations	6	6
F	Damage Prevention	8	8
G	Field Inspections	11	11
Н	Interstate Agent State (If Applicable)	0	0
I	60106 Agreement State (If Applicable)	0	0
TOTA	LS	111	110.5
State R	Rating		99.5



DADTO

PART A - Progress Report and Program Documentation

Review



**Evaluator Notes:** 

NH PUC has automatic adoption for adopting federal rules and regulations.

Points(MAX) Score

9 List of Planned Performance - Did state describe accomplishments on Progress Report in detail - Progress Report Attachment 10 Yes = 1 No = 0 Needs Improvement = .5

Evaluator Notes:

Program Goals and Accomplishments and areas of Improvement were described in detail in Attachment 10 of Progress Report and are consistent with the program goals Supplied in the Grant Application. Most of the elements of Appendix S of the Guidelines can be found. Many of the goals are long term and will take multiple years to accomplish (accelerated replacement programs). Short term goals of strong enforcement, greater transparency on website, improve metrics of emergency response time and decrease of outstanding leaks have been met.

10 General Comments: Info Only = No Points Info OnlyInfo Only

1

**Evaluator Notes:** 

Total points scored for this section: 9.5 Total possible points for this section: 10



- Standard Inspection procedures should give guidance to state inspectors that insure consistency in all inspections conducted by the state? The following elements should be addressed at a minimum pre-inspection activities, inspection activities, post-inspection activities.
- 2 2

Yes = 2 No = 0 Needs Improvement = 1

#### **Evaluator Notes:**

A review of New Hampshire PUC Guidelines for Pipeline Safety Inspections last revised in Dec 2016 found this item is listed located on page 6, under Routine Inspections within Section V. Types of Inspections. All inspections will be performed at least every five years using Federal Form 2. These are supplemented with NH inspection modules covering specific areas and further supplemented by Specific Activity Items Inspections. Collectively these will comprise and cover the components of Standard Inspections.

First bullet: Instructions pertaining to pre-inspection are located on page 11 under Section VIII Inspection Preparation, page 2, Section III Notice of Inspection; and page 13 under Section IX Miscellaneous/General.

Second bullet: Inspection activities instructions are addressed on page 2, Section III Notice of Inspections; page 11 under Section VII. Documentation; and page 13 under Section IX Miscellaneous/General.

Third bullet: Post-Inspection activities is located on page 11, Section VII Documentation and page 13 under Section IX Miscellaneous/General.

- IMP and DIMP Inspection procedures should give guidance to state inspectors that insure consistency in all inspections conducted by the state? The following elements should be addressed at a minimum pre-inspection activities, inspection activities, post-inspection activities.
  - Yes = 1 No = 0 Needs Improvement = .5

#### **Evaluator Notes:**

A review of New Hampshire PUC Guidelines for Pipeline Safety Inspections last revised in Dec 2016 found this item is listed located on page 6, under Integrity Management Inspections within Section V. Types of Inspections. All inspections will be performed at least every five years using Federal Form PHMSA GT IA form for the former Protocols A-N. Form 16 can be used for subsequent assessments in the field (typically ILI). This Integrity Management Inspections is comprised of Distribution IMP and Transmission IMP. Federal Database updates are required when they are configured to upload the

First bullet: Instructions pertaining to pre-inspection is located on page 11 under Section VIII Inspection Preparation, page 2, Section III Notice of Inspection; and page 13 under Section IX Miscellaneous/General.

Second bullet Inspection activities instructions are addressed on page 2, Section III Notice of Inspections; page 11 under Section VII. Documentation; and page 13 under Section IX Miscellaneous/General.

Third bullet: Post-Inspection activities is located on page 11, Section VII Documentation and page 13under Section IX Miscellaneous/General.

- 3 OQ Inspection procedures should give guidance to state inspectors that insure consistency in all inspections conducted by the state? The following elements should be addressed at a minimum - pre-inspection activities, inspection activities, post-inspection activities.
  - Yes = 1 No = 0 Needs Improvement = .5

#### **Evaluator Notes:**

A review of New Hampshire PUC Guidelines for Pipeline Safety Inspections dated Dec 2016 found this item is listed on page 9 under Section V. Operator Qualification Inspections will be performed at least every five years using the Federal Form 14 for Protocols 1-8. Uploading results to the federal database (when possible) is a requirement.

Items pertaining to pre-inspection is located on page 11 under Section VIII Inspection Preparation and page 2, Section III Notice of Inspection.

Inspection activities instructions are addressed on page 2, Section III Notice of Inspections; page 11 under Section VII. Documentation; and page 13 under Section IX Miscellaneous/General.

Post-Inspection activities is located on page 11, under Section VII Documentation and page 13 under Section IX



1

Damage Prevention Inspection procedures should give guidance to state inspectors that insure consistency in all inspections conducted by the state? The following elements should be addressed at a minimum - pre-inspection activities, inspection activities, post-inspection activities.

1 1

Yes = 1 No = 0 Needs Improvement = .5

#### **Evaluator Notes:**

A review of New Hampshire PUC Guidelines for Pipeline Safety Inspections last revised Dec 2016 found this item is listed on page 9 under Section V Damage Prevention Inspections will be performed on a limited basis not to exceed 5 years. Note The Safety Division rarely performs Damage Prevention Inspections except to review the Operator's O&M and OQ plans that pertain to Damage Prevention. Most field inspections are referred to the Underground Damage Prevention Specialist to investigate and enforce. The Safety Division Underground Damage Prevention Guidelines discusses the enforcement procedures.

Instructions pertaining to pre-inspection is located on page 11 under Section VIII Inspection Preparation, page 2, Section III Notice of Inspection; and page 13 under Section IX Miscellaneous/General.

Inspection activities instructions are addressed on page 2, Section III Notice of Inspections; page 11 under Section VII. Documentation; and page 13 under Section IX Miscellaneous/General.

Post-Inspection activities is located on page 11, Section VII Documentation and page 13 under Section IX Miscellaneous/General.

5 Any operator training conducted should be outlined and appropriately documented as needed.

1

1

Yes = 1 No = 0 Needs Improvement = .5

#### **Evaluator Notes:**

New Hampshire PUC Guidelines for Pipeline Safety Inspections last revised in Dec 2016 found this item is listed On-Site Operator Inspections under Section V. Types of Inspections will be performed on a limited basis with no associated inspection interval. These are rarely performed and classified as such. New Hampshire restricts the use of On Site Operator Training given by inspectors as an Inspection Type and is listed on page 8.

6 Construction Inspection procedures should give guidance to state inspectors that insure consistency in all inspections conducted by the state? The following elements should be addressed at a minimum - pre-inspection activities, inspection activities, post-inspection activities.

1 1

Yes = 1 No = 0 Needs Improvement = .5

## Evaluator Notes:

A review of New Hampshire PUC Guidelines for Pipeline Safety Inspections last revised in Dec 2016 found this item is listed located on page 6, under Routine Inspections within Section V Types of Inspections. All inspections will be performed on a limited basis with no specific associated inspection cycle and make up the applicable OPS Forms 2 and 5. These are supplemented with NH inspection modules covering specific areas and further supplemented by Specific Activity Items Inspections. Collectively these will comprise and cover the components of Design Testing and Construction. Typically these inspections are reserved for material selections for new systems, valve spacing design criteria (state) and bridge crossings. Most everyday construction activities fall under Standard Inspections since they are connected to existing systems and incorporate written procedures into the O&M manual.

Instructions pertaining to pre-inspection is located on page 11 under Section VIII Inspection Preparation, page 2, Section III Notice of Inspection; and page 13 under Section IX Miscellaneous/General.

Inspection activities instructions are addressed on page 2, Section III Notice of Inspections; page 11 under Section VII. Documentation; and page 13 under Section IX Miscellaneous/General.

Post-Inspection activities are located on page 11, Section VII Documentation and page 13 under Section IX Miscellaneous/General.

7	Does inspection plan address inspection priorities of each operator, and if necessary each unit, based on the following elements?  Yes = 6 No = 0 Needs Improvement = 1-5	6		6
	a. Length of time since last inspection (Within five year interval)	Yes •	No 🔾	Needs Improvement
	b. Operating history of operator/unit and/or location (includes leakage, incident and compliance activities)	Yes •	No 🔾	Needs Improvement
	c. Type of activity being undertaken by operators (i.e. construction)	Yes 💿	No 🔾	Needs Improvement
	<ul> <li>d. Locations of operators inspection units being inspected - (HCA's, Geographic areas, Population Density, etc)</li> <li>e. Process to identify high-risk inspection units that includes all threats - (Excavation</li> </ul>	Yes •	No 🔾	Needs Improvement
	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)	Yes •	No 🔾	Needs Improvement
	f. Are inspection units broken down appropriately?	Yes 💿	No 🔾	Needs Improvement
Crite Item Item Item Item Item NH	tion VI. Risk Based Inspection Process. Inspection Risk Criteria spreadsheet shows the follogeria are used:  a a, is located in Inspection Risk Criteria, number 2.  b b, is located in Inspection Risk Criteria, number 10 thru 14  c c, is located in Inspection Risk Criteria, number 15  d d, is located in Inspection Risk Criteria, number 1, 16, 18  d e, is located in Inspection Risk Criteria, number 17  of, this is determined by Program Manager based on each operator and is specific to each ty indicated they update the categories annually but the overall risks rankings have not relative rators over the recent years.	pe of ope	erator.	
8 Evaluato	General Comments: Info Only = No Points or Notes:	Info On	lyInfo Oı	nly

Total points scored for this section: 13 Total possible points for this section: 13

1	Was ratio of Total Inspection person-days to total person days acceptable? (Director of State Programs may modify with just cause) Chapter 4.3 $Yes = 5 No = 0$	5		5
	A. Total Inspection Person Days (Attachment 2):			
	176.00  B. Total Inspection Person Days Charged to the Program (220 X Inspection Person Years) (Attachment 7): 220 X 2.00 = 440.00			
	Ratio: A / B 176.00 / 440.00 = 0.40			
Evaluate	If Ratio >= 0.38 Then Points = 5, If Ratio < 0.38 Then Points = 0 Points = 5 or Notes:			
	issues. Ratio of 0.4 is greater than the needed ratio of .38.			
2	Has each inspector and program manager fulfilled the T Q Training Requirements? (See Guidelines Appendix C for requirements) Chapter 4.4  Yes = 5 No = 0 Needs Improvement = 1-4	5		5
	a. Completion of Required OQ Training before conducting inspection as lead?	Yes •	No 🔘	Needs Improvement
	b. Completion of Required DIMP*/IMP Training before conducting inspection as lead? *Effective Evaluation CY2013	Yes •	No 🔾	Needs Improvement
	c. Root Cause Training by at least one inspector/program manager	Yes •	No 🔘	Needs Improvement
	d. Note any outside training completed	Yes	No 🔘	Needs Improvement
Evoluote	e. Verify inspector has obtained minimum qualifications to lead any applicable standard inspection as the lead inspector.  or Notes:	Yes •	No 🔾	Needs Improvement
D E J V D E	Burnell, J Vercellotti, and R Knepper have completed OQ Training. ercellotti, and R Knepper have completed DIMP and IMP Training. Burnell, J Vercellotti, and R Knepper have completed Root Cause Training. three have obtained minimum qualifications to lead Standard Inspection as Lead Inspector.			
3	Did state records and discussions with state pipeline safety program manager indicate adequate knowledge of PHMSA program and regulations? Chapter 4.1,8.1 Yes = 2 No = 0 Needs Improvement = 1	2		2
R K Pip	or Notes: Enepper has nearly 13 years experience as Program Manager and has been past NAPSR Chai eline Staff Subcommittee as well as participates on various NAPSR Subcommittees, as well nmittees.			
4	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  Yes = 2 No = 0 Needs Improvement = 1	2		2
	or Notes: sarrett letter to Chairman dated 10/21/16 and noted deficiencies for CY 2015.			
Cha	narrett letter to Chairman dated 10/21/16 and noted deficiencies for CY 2015.  nirman Honigberg return letter to Z Barrett dated 12/16/16 addressed deficiencies of CY 2015.  60 day requirement was met.	5.		
5	Did State conduct or participate in pipeline safety training session or seminar in Past 3	1		1

**Evaluator Notes:** 

Years? Chapter 8.5 Yes = 1 No = 0

NH PUC in conjunction with the New England Pipeline Safety Representatives (NEPSR) held the TQ seminar on October 21-22, 2016 in Portland, Maine.

The number of attendees were approximately two hundred.

NEPSR holds a TQ Seminar each year in October on a rotating basis for States Hosting (6 states). PHMSA T&Q and PHSA Eastern Region Meeting representatives were in attendance and participated.

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

Yes = 5 No = 0 Needs Improvement = 1-4

5

5

#### **Evaluator Notes:**

Since the CY 2015 Evaluation, NH has developed a spreadsheet that will be used in the interim until a new database is selected and implemented that has programmed logical interval scheduler and code section reviewer. The time intervals in the procedures were able to be met because of the consolidation of the LPG operators and associated inspection units. Many of the LPG operators were going away from individual plans at the local or regional office to more corporate based plan that are used throughout the inspection units.

A review of files and NH PUC written procedures confirm all inspections were scheduled in accordance to the established time intervals listed under Section IV Intervals of Inspections described on pages 2-5.

(New Hampshire is awaiting the results of the PHMSA pilot with state of Washington in 2017 before deciding on how to use IA.)

7 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

2

2

Yes = 2 No = 0 Needs Improvement = 1

#### **Evaluator Notes:**

Yes, New Hampshire uses the federal forms or a version of the inspection forms to perform their inspections. With the exception of Drug and Alcohol Inspections, Inspection reports found all answers were completed with S, U, NA & NC in the appropriate block along with comments in the inspector remarks section. New Hampshire does not use S+ or Concern on their inspection reports. NH also requires inspectors to fill out comments so that rationale for the inspection result is evident. Nearly all inspections are accompanied by photo documentation.

Did the state review operator procedures for determining if exposed cast iron pipe was examined for evidence of graphitization and if necessary remedial action was taken?

(NTSB) Chapter 5.1

Yes = 1 No = 0

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1

#### **Evaluator Notes:**

This is shown on PHMSA Form 2 and NH PUC inspection Form 4 Comprehensive Corrosion (reviewed Form 4 for verification).

Unitil (Northern Utilities) lists in Section 6.3.3 of their O&M this requirement. Each segment requires replacement or repair. Liberty lists in Section 8B Examination of a Buried Pipe When Exposed in subsection 6.2 Inspection for Graphitization describes inspection and requires replacement or repair.

LPG Operators and Transmission Operators do not use Cast Iron.

9 Did the state review 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) (NTSB) Chapter 5.1

Yes = 1 No = 0

#### **Evaluator Notes:**

Did the state review 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) (NTSB) Chapter 5.1

(Yes= 1 point, No= 0 Points)

Comments:

Liberty is required to file all leaks, all Cast Iron breaks on a monthly basis to the Safety Division per Puc 508.05 (d) and 509.15. The Safety Division plots those leaks for trending.

In addition Puc rule 508.04 (d) requires continuous monitoring during the winter months of any system containing cast iron.

Lastly Liberty partakes in a Cast Iron Bare Steel accelerated replacement program where all replacements are ranked for priority of replacement. This program is annually docketed, requires interactive participation with the NH PUC Safety Division and reviewed formally with the Commission.

Liberty's O&M Manual Procedure 11-B "Continuing Surveillance, Subsection 6.1.5 Review and Analysis of Records states Engineering department will initiate action after reviewing Leakage Survey Records including Leak Repair Work Orders and Leak Re Evaluation Work Orders as well as Pipeline Patrol Work Orders, Subsection 6.1. Scheduled Inspection Requirements references 6.1.2 Action Criteria options such as repair, recondition, replace or retire with an accompanying schedule.

Unitil has less than a mile of cast iron which will be removed in CY 2017. LPG Operators and Transmission Operators do not use Cast Iron.

Did the state review 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? (NTSB) Chapter 5.1 Yes = 1 No = 0

#### **Evaluator Notes:**

Liberty's O&M contains this in Section 12 C Leakage Surveys subsection 6.7 Leakage Investigation for Leakage Surveys Liberty's Emergency Response plans has numerous references to Leak Investigation (section B, F, H, and Appendices) Liberty's O&M in section 12B Leak Response, Leak Classification, Leak Repair subsection 6.1.6 Investigating an outside leak makes specific references to migration and multiple building checks (at least 5).

Unitil's O&M lists this in Section 2 N Leak Management subsections 1.0 General and 3.2 Sub-Surface Gas Detection Survey (including barhole surveys). Unitil's Emergency Response Plan section IV. EMERGENCY RESPONSE PROCESSES references in subsection C Initial Response & Reporting states "If the emergency involved an indication of a gas leak it shall be graded and investigated in accordance with Unitil's O&M Manual (Section 2-N Leak Management)".

Did the state review operator records of previous accidents and failures including reported third party damage and leak response to ensure appropriate operator response as required by 192.617? Chapter 5.1

Yes = 1 No = 0

#### **Evaluator Notes:**

Leak Response is reported monthly by Liberty and Unitil per Commission Orders. These include 3rd party Damage and usually result in Class I Leak.

Monthly records are tracked and graphed by the Safety Division. Times are specified to be 30 minutes, 45 minutes or 60 minutes depending upon the time of discovery. For small operators it is limited to 30 minutes.

Third Party Damages are required to be reported monthly and these are tracked by the Underground Damage Prevention Specialist. Each damage is reviewed to ensure appropriate operator response.

Previous Accidents, while few, are also required to be reviewed for Emergency Response Times.

Has the state reviewed Operator Annual reports, along with Incident/Accident reports, for 2 accuracy and analyzed data for trends and operator issues?

Yes = 2 No = 0 Needs Improvement = 1

#### **Evaluator Notes:**

Operator Annual Reports are reviewed, data analyzed and trending performed for Liberty and Unitil and formerly NH Gas. Historical Tracking is achieved and results posted on Safety Division Websites.

Accuracy of data reflects the data integrity issues each company has.



1

EFVs data for Liberty are questionable and Operator has been contacted of the issue. NOPV's have been issued for failing to report Mechanical Fittings. Progress Report reflects the review of Incidents for 2015 and that reflects State has determined different causes reported. In CY 2015 Unitil was issued a violation for not filing Incident Reports on time.

13	Did state input all applicable OQ, DIMP/IMP inspection results into federal database in a	2	2
	timely manner? This includes replies to Operator notifications into IMDB database.		
	Chapter 5.1		
	Yes $= 2$ No $= 0$ Needs Improvement $= 1$		

#### **Evaluator Notes:**

OQ and IMP inspections are updated into federal database or use IA forms. Timeliness is based on PHMSA's changing of security issues, accessibility to the databases, types of forms that can be uploaded. Most of these require multiple phone calls and attempts to upload.

Has state confirmed intrastate transmission operators have submitted information into 1 NPMS database along with changes made after original submission?

Yes = 1 No = 0 Needs Improvement = .5

#### **Evaluator Notes:**

NPMS is updated annually for the lone transmission line of Liberty, typically an email copy is sent to the Safety Division.

Is the state verifying operators are conducting drug and alcohol tests as required by regulations? This should include verifying positive tests are responded to in accordance with program. 49 CFR 199

Yes = 2 No = 0 Needs Improvement = 1

#### **Evaluator Notes:**

New Hampshire completed comprehensive Drug and Alcohol Inspections in 2016 for both operators. A letter of concern was generated.

Is state verifying operators OQ programs are up to date? This should include verification of any plan updates and that persons performing covered tasks (including contractors) are properly qualified and requalified at intervals determined in the operators plan. 49 CFR

192 Part N

Yes = 2 No = 0 Needs Improvement = 1

### Evaluator Notes:

OQ plans are required to be submitted annually per Puc 506.02 (t) including notifications of changes. Field verification is performed often during field inspections.

17 Is state verifying operator's gas transmission integrity management programs (IMP) are up to date? This should include a previous review of IMP plan, along with monitoring progress on operator tests and remedial actions. In addition, the review should take in to account program review and updates of operators plan(s). (Are the State's largest operators programs being contacted or reviewed annually?). 49 CFR 192 Subpart 0
Yes = 2 No = 0 Needs Improvement = 1

#### **Evaluator Notes:**

IMP plans are required to be submitted annually per Puc 506.02 (t) including notifications of changes. The Safety Division just switched from an 84 month review to a 60 month review. The transmission lines are piggable or made of plastic so the IMP inspections are not complex for the 19 miles of transmission pipeline. Latest pipeline run was in Nov 2015 with anomaly dig in 2016.

Is state verifying operator's gas distribution integrity management Programs (DIMP)? This should include a review of DIMP plans, along with monitoring progress. In addition, the review should take in to account program review and updates of operators plan(s). (Are the State's largest operators programs being contacted or reviewed annually?). 49 CFR 192 Subpart P DIMP? First round of program inspections should have been complete by December 2014

Yes = 2 No = 0 Needs Improvement = 1

2 2

2

2

**Evaluator Notes:** 



The Safety Division staggers them. The plans are required to be submitted annually by Puc 506.02(t). Liberty and Unitil was a comprehensive review and completed in 2013. Both will be reviewed in 2017 again to maintain 5 year interval. Mandated accelerated replacement programs require operators to replace leak prone pipe and were in place prior to DIMP implementation.

LPG Operators use ITS's, a New England Consortium, plan.

Is state verifying operators Public Awareness programs are up to date and being followed. State should also verify operators have evaluated Public Awareness programs for effectiveness as described in RP1162. PAPEI Effectiveness Inspections should have been completed by December 2013. PAPEI Effectiveness Inspections should be conducted every four years by operators. 49 CFR 192.616

Yes = 2 No = 0 Needs Improvement = 1

2

**Evaluator Notes:** 

PAPEI Inspections were completed for Liberty and Unitil in November 2016. Smaller LPGs have a simplified verification process.

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).

1

Yes =  $\frac{1}{1}$  No = 0 Needs Improvement = .5

**Evaluator Notes:** 

The Safety Division website has information including enforcement for damage prevention activities and pipeline safety violations. The Safety Division is looking to enhance this in 2017 to include all enforcement actions pending Commission approval.

21 Did state execute appropriate follow-up actions to Safety Related Condition (SRC) Reports? Chapter 6.3

NA

1

1

Yes = 1 No = 0 Needs Improvement = .5

**Evaluator Notes:** 

No SRCs in CY 2016.

Did the State ask Operators to identify any plastic pipe and components that has shown a record of defects/leaks and what those operators are doing to mitigate the safety concerns?

1

Yes = 1 No = 0 Needs Improvement = .5

**Evaluator Notes:** 

New Hampshire PUC Order 2570 in 2012 makes this an annual requirement. All Adyl A failures are reported to PPDC and the PUC.

23 Did the state participate in/respond to surveys or information requests from NAPSR or PHMSA? 1

Yes = 1 No = 0 Needs Improvement = .5

**Evaluator Notes:** 

Yes.

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.

1

No = 0 Needs Improvement = .5 Yes = 1

**Evaluator Notes:** 

There has only been one waiver ever by the NHPUC and it was outdated. NH PUC requested the removal of the LNG waiver granted on February 11, 1993 be removed from PHMSA website. This request was submitted by R Knepper on November 7, 2014 and the wavier has been removed from PHMSA website in 2015.

25	Did the state attend the National NAPSR Board of Directors Meeting in CY being evaluated?  No = 0 Needs Improvement = .5 Yes = 1	1		1
R K	or Notes: Enepper attended the meeting in Indianapolis, IN from September 26-September 30, 2016 are eting and new program managers meetings to help newest members.	nd conduc	eted a leg	gislative
26	Discussion on State Program Performance Metrics found on Stakeholder Communication site - http://primis.phmsa.dot.gov/comm/states.htm No = 0 Needs Improvement = 1 Yes = 2	n 2		2
	a. Discussion of Potential Accelerated Actions (AA's) based on any negative trends	Yes •	No 🔘	Needs Improvemen
	b. NTSB P-11-20 Meaningful Metrics	Yes	No 🔘	Needs Improvemen
Evaluate	or Notes:			mprovemer
The	ere was discussion and review of the PHMSA State Metrics webpage during the evaluation.			
27	Discussion with State on accuracy of inspection day information submitted into State Inspection Day Calculation Tool. (No points) Info Only = No Points	Info On	lyInfo Or	ıly
Evaluate	or Notes:			
The	ere was discussion concerning the SICT during the evaluation.			
28	Did the State verify Operators took appropriate action regarding Pipeline Flow Reversals Product Changes and Conversions to Service? See ADP-2014-04 (No Points) Info Only = No Points	s, Info On	lyInfo Or	ıly
Evaluate	or Notes:			
No	pipelines in NH can reverse flow.			
29	General Comments: Info Only = No Points	Info On	lyInfo Or	nly
Evaluate	or Notes:			
	Total points s	scored for	this sect	 tion: 48
	Total possible	naints for	this sect	tion: 48

Total possible points for this section: 48



1	Does the state have written procedures to identify steps to be taken from the discovery to resolution of a probable violation? Chapter 5.1	4	,	4
	Yes = 4 No = 0 Needs Improvement = 1-3 a. Procedures to notify an operator (company officer) when a noncompliance is identified	Yes •	No 🔾	Needs Improvement
	b. Procedures to routinely review progress of compliance actions to prevent delays or breakdowns	Yes ①	No 🔾	Needs Improvement
	c. Procedures regarding closing outstanding probable violations	Yes 💿	No 🔘	Needs Improvement
	r Notes: see procedures are listed in the NH PUC Pipeline safety Guidelines, Section X Enforcement I per PUC Rules 511.01-511.10 requires a response for the operator within centin time frames of			
2	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 = 4 No = 0 Needs Improvement = 1-3	4		4
	a. Were compliance actions sent to company officer or manager/board member if municipal/government system?	Yes •	No 🔾	Needs Improvement
	b. Document probable violations	Yes •	No 🔾	Needs Improvement
	c. Resolve probable violations	Yes 💿	No 🔾	Needs Improvement
	d. Routinely review progress of probable violations	Yes 💿	No 🔘	Needs Improvement
	e. Were applicable civil penalties outlined in correspondence with operator(s)	Yes 💿	No 🔾	Needs Improvement
Writ	the procedures are listed in the NH PUC Pipeline safety Guidelines, Section X Enforcement I ten compliance actions are sent to an officer of private utilities, including LPG operators. A psed by RSA 374:7-A are included in the letter.			
3	Did the state issue compliance actions for all probable violations discovered? Yes = 2 No = 0 Needs Improvement = 1	2	2	2
Evaluator				
Yes.	No issues found.			
4	Did compliance actions give reasonable due process to all parties? Including "show cause" hearing if necessary. Yes = 2 No = 0	2	<u>'</u>	2
Evaluator				
Due	process is built into the PUC 511.09 rule and can be appealed or adjudicated to the Commis	ssion.		
5	Is the program manager familiar with state process for imposing civil penalties? Were civil penalties considered for repeat violations (with severity consideration) or violations resulting in incidents/accidents? (describe any actions taken)  Yes = 2 No = 0 Needs Improvement = 1	2	·	2
	r Notes: Rule 511.05 and 511.08(b) states the severity considerations, repeatd violations and gravity concidered.	y of the	violation	are factors
6	Can the State demonstrate it is using their enforcement fining authority for pipeline safety violations?	1		1

DUNS: 049445518 2016 Gas State Program Evaluation

**Evaluator Notes:** 

Yes = 1 No = 0 Needs Improvement = .5

Civil penalties issued in 2016 totaled \$156,500.

7 General Comments: Info Only = No Points Evaluator Notes: Info OnlyInfo Only

Total points scored for this section: 15

Total possible points for this section: 15



1	Does the state have written procedures to address state actions in the event of an inc accident?  Yes = 2 No = 0 Needs Improvement = 1	eident/ 2		2
The	or Notes: ese procedures are listed in the NH PUC Pipeline safety Guidelines, Section V, Failure scribing the receiving and responding to operators reports of incidents.	Investigation	Inspection	ons on Page :
2	Does state have adequate mechanism to receive and respond to operator reports of incidents, including after-hours reports? And did state keep adequate records of Inc Accident notifications received? Chapter 6 Yes = 2 No = 0 Needs Improvement = 1	2 cident/		2
	a. Acknowledgement of MOU between NTSB and PHMSA (Appendix D)	Yes •	No 🔾	Needs Improvement
F 1 4	b. Acknowledgement of Federal/State Cooperation in case of incident/accident (Appendix E)	Yes •	No 🔾	Needs Improvement
PU hou	or Notes: C Rule 504.05, Emergency Notification has requirements to notify promptly by telephour of incidents and type of information supplied with requirements to notify OPS. C Safety Division updates a quarterly contact information sheetwith 3 people on call 24	_		
	If onsite investigation was not made, did state obtain sufficient information from the operator and/or by other means to determine the facts to support the decision to not on-site? Chapter 6 Yes = 1 No = 0 Needs Improvement = .5 or Notes: Cety Division investigate all DOT reportable incidents.			1
4	Were all incidents investigated, thoroughly documented, and with conclusions and recommendations?  Yes = 3 No = 0 Needs Improvement = 1-2	3	N	A
	a. Observations and document review	Yes 🔾	No 💿	Needs Improvement
	b. Contributing Factors	Yes 🔾	No 💿	Needs Improvement
	c. Recommendations to prevent recurrences when appropriate	Yes ()	No ①	Needs
	or Notes: incidents in 2016.			Improvement
5	Did the state initiate compliance action for violations found during any incident/acc investigation? Yes = 1 No = 0	ident 1	N	A
Evaluat	or Notes:			
No	incidents in 2016.			
6	Did the state assist region office by taking appropriate follow-up actions related to to operator incident reports to ensure accuracy and final report has been received by PHMSA? (validate report data from operators concerning incidents/accidents and	he 1	N	A

Evaluator Notes:

No incidents in 2016.

investigate discrepancies) Chapter 6 Yes = 1 No = 0 Needs Improvement = .5

7 Does state share lessons learned from incidents/accidents? (sharing information, such as: 1 at NAPSR Region meetings, state seminars, etc)

Yes = 1 No = 0

**Evaluator Notes:** 

incidents are on state website and are shared at NAPSR region meetings.

8 General Comments: Info Only = No Points Info OnlyInfo Only

**Evaluator Notes:** 

Total points scored for this section: 6 Total possible points for this section: 6



1 Has the state reviewed 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? NTSB Yes = 2 No = 0 Needs Improvement = 1

2 2

**Evaluator Notes:** 

NH PUC Rule 805.02(e) covers trench less technology and Rule 806.01, 806.02, 806.03, 806.04, 806.05 identify marking zone tolerance, markers, identification, emergency and marking certain newly installed underground facilities. Additionally, NH PUC form Damage Prevention Module includes this item in section 192.614 (5 & Sa). A review of one operator, Liberty Utilities Procedure Damage Prevention Section 11.C 6.6.7 was reviewed and found co"ect. Unitil (Northern Utilities) states in section 2G of the O&M "Each natural gas utility shall maintain written procedures for protecting existing underground facilities during directional drilling and other trenchless technology installation techniques. Thesewritten procedures shall utilize the guidance material provided by the Gas Piping Technology Committee (GPTC) detailed in Guidance Material Appendix G-192-6, or other recognized industry standard. [ME Puc 420.3D] Refer to Appendix 2-G, GPTC Guide Material G-192-6."

2 Did the state inspector check to assure the pipeline operator is following its written procedures pertaining to notification of excavation, marking, positive response and the availability and use of the one call system? Yes = 2 No = 0 Needs Improvement = 1

2

2

**Evaluator Notes:** 

NH PUC requires operators to report marking of underground facilities and any mismark or failed to mark. In addition to the federal inspection form, NH PUC inspectors use the damage prevention module E-26 to review notification, marking, positive response and the use of the one call system. The reporting requirement is reviewed by their Damage Prevention Specialist each month. Positive Response is required by PUC rule PUC 804.02(e) and 806.02 (a)(2).

3 Did the state encourage and promote practices for reducing damages to all underground facilities to its regulated companies? (i.e. such as promoting/adopting the CGA Best Practices encouraging adoption of the 9 Elements, etc.) Yes = 2 No = 0 Needs Improvement = 1

2

2

**Evaluator Notes:** 

This is accomplished by the local distribution companies being a member of the Hampshire Management Underground Safety Training (MUST) organization whichis a recognized regional CGA partner. NH PUC has several best practices in locating underground facilities pertaining to using only company personnel in locating their gas lines and NH PUC rule 804.03 Training of Locators. This best practice was implemented thru individual NH PUC Order to each company operator. All nine elements have been adopted by the NHPUC as recognized by the 2014 PHMSA Characterization Tool Results.?

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? (This can include DIRT and other data shared and reviewed by the pipeline safety program) Yes = 2 No = 0 Needs Improvement = 1

2 2

**Evaluator Notes:** 

NH PUC collects data on pipeline damages per 1,000 locate request. Operators and excavators are required to submit monthly causes of excavation damage and final- determinations are made after due process in accordance with NH PUC Rule 804.01 (a-e) (E-26). Trends are plotted and reviewed by staff. A review of data found the number of damages per 1,000. In CY2016 it was 1.27 and CY2015 it was 1.41. Past 6 years are found on the Safety Division Website under "Overall NH Damage Prevention Statistics" Reviewed information on NH PUC website.

5 General Comments: Info Only = No Points

Info OnlyInfo Only

**Evaluator Notes:** 



1	Operator, Inspector, Location, Date and PHMSA Representative Info Only = No Points	Info OnlyInfo Only	,
	Name of Operator Inspected: (1) Liberty Utilities (2) Liberty Utilities		
	Name of State Inspector(s) Observed: (1) David Burnell (2) Joe Vercellotti		
	Location of Inspection: (1) Nashua, NH (2) Manchester, NH		
	Date of Inspection: (1) 6/28/2017 (2) 6/28/2017		
E 1 .	Name of PHMSA Representative: Jim Anderson		
Evaluato	or Notes:		
2	Was the operator or operator's representative notified and/or given the opportunity to be present during inspection? $Y_{es} = 1 N_0 = 0$	1 1	
Evaluato	or Notes:		
(1) (2)			
3	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)  Yes = 2 No = 0 Needs Improvement = 1	2 2	
Evaluate (1)	or Notes:		
(2)			
4	Did the inspector thoroughly document results of the inspection?	2 2	
Evaluato	Yes = 2 No = 0 Needs Improvement = 1 or Notes:		
(1)	Yes - no issues Yes - no issues		
(2)	1 C5 - HO ISSUES		
5	Did the inspector check to see if the operator had necessary equipment during inspection to conduct tasks viewed? (Maps,pyrometer,soap spray,CGI,etc.)  Yes = 1 No = 0	1 1	
Evaluato	or Notes:		
(1)			
6	Did the inspector adequately review the following during the field portion of the state evaluation? (check all that apply on list) $Yes = 2 No = 0 Needs Improvement = 1$	2 2	
	a. Procedures		
	<ul><li>b. Records</li><li>c. Field Activities</li></ul>		
	V. 1 1010 1 1011 1 11100		



Evaluato	d. or Notes:	Other (please comment)		
7	regulati	inspector have adequate knowledge of the pipeline safety program and ons? (Evaluator will document reasons if unacceptable) No = 0 Needs Improvement = 1	2	2
Evaluate (1) (2)	or Notes: Yes	to viceus improvement i		
8		inspector conduct an exit interview? (If inspection is not totally complete the w should be based on areas covered during time of field evaluation)	1	1
Evaluate (1) (2)	or Notes: Yes			
9		the exit interview, did the inspector identify probable violations found during the ons? (if applicable)	1	NA
(1)	or Notes: None foun None foun	d		
10	descript with Ot Other.	tion of field observations and how inspector performed) 2) Best Practices to Share her States - (Field - could be from operator visited or state inspector practices) 3)	Info Onlyl	nfo Only
	Info Only	y = No Points	_	
	a.	Abandonment		
	b.	Abnormal Operations		
	c.	Break-Out Tanks		
	d.	Compressor or Pump Stations		
	e.	Change in Class Location		
	f.	Casings		
	g. h.	Cast iron Panlacement		
	i.	Cast-iron Replacement Damage Prevention		
	i. j.	Deactivation Deactivation		
	J. k.	Emergency Procedures		
	1.	Inspection of Right-of-Way		
	m.	Line Markers		
	n.	Liaison with Public Officials		
	0.	Leak Surveys		
	р.	MOP		
	q.	MAOP		
	r.	Moving Pipe		
	S.	New Construction	$\boxtimes$	
	t.	Navigable Waterway Crossings		
	u.	Odorization		
	v.	Overpressure Safety Devices	$\boxtimes$	

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W.	Plastic Pipe Installation	$\boxtimes$
Χ.	Public Education	
y.	Purging	
Z.	Prevention of Accidental Ignition	
A.	Repairs	
B.	Signs	
C.	Tapping	
D.	Valve Maintenance	
E.	Vault Maintenance	
F.	Welding	
G.	OQ - Operator Qualification	
H.	Compliance Follow-up	
I.	Atmospheric Corrosion	
J.	Other	
Evaluator Notes:		
-		

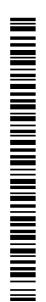
Total points scored for this section: 11 Total possible points for this section: 11

PART	H - Interstate Agent State (If Applicable) Po	ints(MAX)	Score
<b>1</b> Evaluator	Did the state use the current federal inspection form(s)?  Yes = 1 No = 0 Needs Improvement = .5  Notes:	1	NA
<b>2</b> Evaluator	Are results documented demonstrating inspection units were reviewed in accordance w "PHMSA directed inspection plan"?  Yes = 1 No = 0 Needs Improvement = .5  Notes:	rith 1	NA
<b>3</b> Evaluator	Did the state submit documentation of the inspections within 60 days as stated in its lat Interstate Agent Agreement form?  Yes = 1 No = 0 Needs Improvement = .5  Notes:	est 1	NA
<b>4</b> Evaluator	Were probable violations identified by state referred to PHMSA for compliance? (NOT PHMSA representative has discretion to delete question or adjust points, as appropriate based on number of probable violations; any change requires written explanation.)  Yes = 1 No = 0 Needs Improvement = .5  Notes:		NA
<b>5</b> Evaluator	Did the state immediately report to PHMSA conditions which may pose an imminent safety hazard to the public or to the environment?  Yes = 1 No = 0 Needs Improvement = .5  Notes:	1	NA
<b>6</b> Evaluator	Did the state give written notice to PHMSA within 60 days of all probable violations found?  Yes = 1 No = 0 Needs Improvement = .5  Notes:	1	NA
7 Evaluator	Did the state initially submit documentation to support compliance action by PHMSA of probable violations?  Yes = 1 No = 0 Needs Improvement = .5  Notes:	on 1	NA
8 Evaluator	General Comments: Info Only = No Points Notes:	Info Onlylı	nfo Only



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

PART	T I - 60106 Agreement State (If Applicable)	oints(MAX)	Score
<b>1</b> Evaluato	Did the state use the current federal inspection form(s)?  Yes = 1 No = 0 Needs Improvement = .5  r Notes:	1	NA
<b>2</b> Evaluato	Are results documented demonstrating inspection units were reviewed in accordance v state inspection plan?  Yes = 1 No = 0 Needs Improvement = .5  r Notes:	with 1	NA
<b>3</b> Evaluato	Were any probable violations identified by state referred to PHMSA for compliance? (NOTE: PHMSA representative has discretion to delete question or adjust points, as appropriate, based on number of probable violations; any change requires written explanation.)  Yes = 1 No = 0 Needs Improvement = .5  T Notes:	1	NA
<b>4</b> Evaluato	Did the state immediately report to PHMSA conditions which may pose an imminent safety hazard to the public or to the environment?  Yes = 1 No = 0 Needs Improvement = .5  r Notes:	1	NA
<b>5</b> Evaluato	Did the state give written notice to PHMSA within 60 days of all probable violations found?  Yes = 1 No = 0 Needs Improvement = .5  r Notes:	1	NA
<b>6</b> Evaluato	Did the state initially submit adequate documentation to support compliance action by PHMSA on probable violations?  Yes = 1 No = 0 Needs Improvement = .5  r Notes:	1	NA



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

Info OnlyInfo Only

7

**Evaluator Notes:** 

General Comments: Info Only = No Points