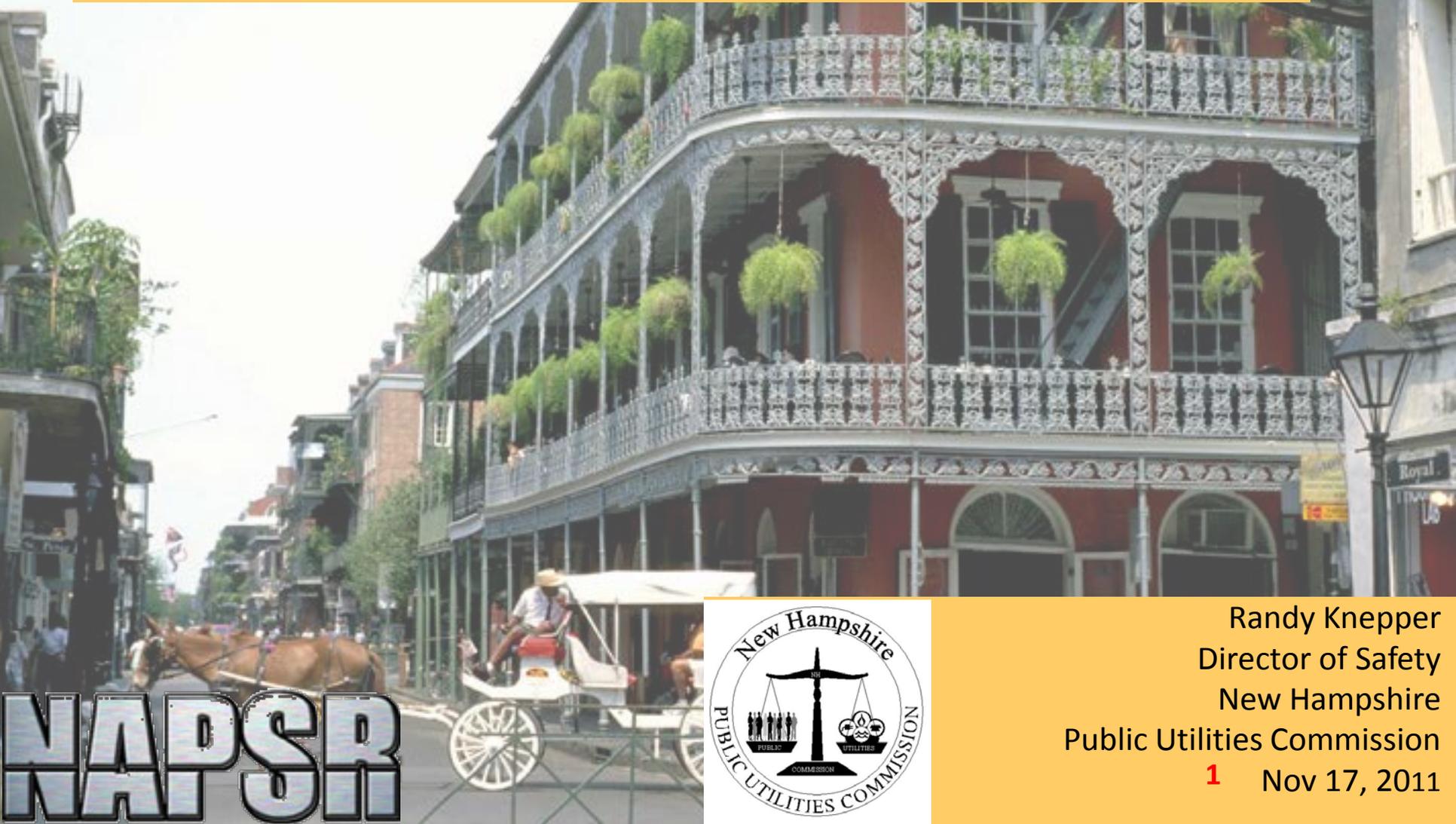


*Pipeline Safety Trust – Getting to ZERO (incidents)  
Gas Pipeline Safety Issues  
San Bruno Lessons Learned*



**NAPS SR**



Randy Knepper  
Director of Safety  
New Hampshire  
Public Utilities Commission  
1 Nov 17, 2011

# State Program Safety Topics

- 1. State Initiatives – Recent Publication  
Technical Resource**
2. NTSB Findings/Recommendations as relates to CPUC and other States
3. Path Forward – Where do States need to improve?



*National Association of Pipeline Safety Representatives*

## WELCOME

The National Association of Pipeline Safety Representatives ("NAPSR or Association") is a non-profit organization of state pipeline safety personnel who serve to promote pipeline safety in the United States and its territories. The Association supports the safe delivery of pipeline products by working closely with USDOT's Pipeline and Hazardous Materials Safety Administration ("PHMSA"), the industry and other interested organizations. NAPSR's Board of Directors is the governing body of the organization and is responsible for NAPSR policy. It includes a Vice-Chairperson, a Secretary, a Treasurer, the Immediate-Past Chairperson and the chairperson of each of NAPSR's five regions. NAPSR also has an Administrative Manager who assists the National Chairperson and is responsible for education and liaison with outside organizations, advising the Board on matters affecting the Association's mission, assisting in implementing the objectives of NAPSR and routine administration. For contact information please click on "Board of Directors" on this page.

### Regional Breakdown of National Pipeline Safety Representatives

[NAPSR Annual Regional and National Meeting Schedule for 2012](#)

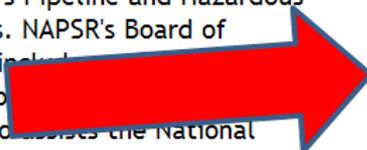
### **HOT OFF THE PRESS: As of 11/08/11**

[New Report Finds State Pipeline Safety Programs Stricter than Federal Requirements](#)

A newly released compendium of gas pipeline regulations reveals that States implement stricter rules and laws than required by the federal government. The "Compendium of State Pipeline Safety Requirements & Initiatives Providing Increased Public Safety Levels" report, authored by the National Association of Pipeline Safety Representatives (NAPSR) and sponsored by the National Association of Regulatory Utility Commissioners, demonstrates that the large majority of State agencies enforce requirements above and beyond those mandated by federal policies.

This detailed and thoroughly researched resource for the first time presents applicable State pipeline

- Home
- Who Are We
- Comments
- Current Issues
- State Program Managers
- Board of Directors
- NAPSR Committees
- Links
- 2011 Events Calendar
- Annual Meetings





# NAPSR

*National Association of Pipeline Safety Representatives*

## Current Issues

### Providing Increased Public Safety Levels -- Executive Summary of Compendium

[Compendium of State Requirements & Initiatives Compared to Code of Federal Regulations](#)

[NAPSR State Survey Results State-by-State Spreadsheet](#)

[Senate Bill S. 275 as Passed Under Unanimous Consent](#)

### PHMSA 5-Year Strategic Plan

### Section-by-Section Overview of PIPES Act

[Redlined versions of the US Code Title 49 Subtitle VIII, Chapter 601](#)

[Redlined versions of the US Code Title 49 Subtitle III, Chapter 61 showing changes due to the PIPES Act](#)

[NAPSR Position Statement - Appropriations related to the PIPES Act of 2006](#)

[Written Statement of National Chairperson to the House Appropriations Subcommittee](#)

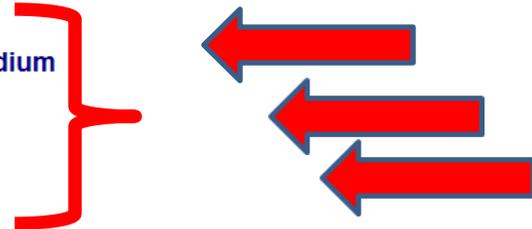
[Letter from NAPSR National Chairperson to the Senate Appropriations Committee - Page 1, Page 2](#)

The Office of Pipeline Safety has announced the debut of several new websites:

[Stakeholder Communications](#)

[The 109th Congress passed legislation entitled the Pipeline Inspection Protection, Enforcement Act of 2006 \(PIPES Act\).](#)

[Distribution Integrity Management Program \(DIMP\)](#)



# New Publication sponsored by NAPSR & NARUC

Found at

[http://www.napsr.org/  
napsr\\_current\\_issues.htm](http://www.napsr.org/napsr_current_issues.htm)

ALSO Found at:

[http://www.naruc.org/  
committees.cfm?c=51#](http://www.naruc.org/committees.cfm?c=51#)



1<sup>st</sup> Edition  
**2011**

Compendium of State Pipeline Safety  
Requirements & Initiatives Providing  
Increased Public Safety Levels compared  
to Code of Federal Regulations



National Association of  
Pipeline Safety  
Representatives

**NAPSR**

9/30/2011

National Association of Regulatory Utility  
Commissioners







# Compendium of State Safety Initiatives

- Over 1,100 identified classified by 22 categories
- Range from simple modification of Federal Safety Rules to modest changes to full blown programs requiring replacement of aging and deteriorating pipeline infrastructure.
- 23% Enhanced Reporting
- 13% Design/Installation Requirements
- 11% Leak Testing & Response to Leaks



# Compendium of State Safety Initiatives

- 1 Enhanced Reporting
- 2 More Direct Oversight
- 3 Valves
- 4 Pressure Testing
- 5 Operating Pressure
- 6 Damage Prevention
- 7 Training/Quals (not OQ)
- 8 Operator Qualification
- 9 Meter Location/Protection
- 10 Odorant
- 11 Leak Tests
- 12 Response to Leaks
- 13 Replacement Programs
- 14 Authority Beyond OPS
- 15 Extending LDC Responsibility
- 16 External/Internal Corrosion
- 17 Cathodic Protection
- 18 Design/Install Requirements
- 19 Risk-based approaches
- 20 Enhanced Record Keeping
- 21 Inactive Services
- 22 State Inspection Programs





# Some Examples of State Safety Initiatives

- **Maine requires operators to GPS pipeline components, all valves, tees, exposed sections and add to records** (Fed Regs no such provision and Record Keeping has been problematic for certain operators)
- **Georgia has implemented a cast iron replacement program for largest operator**
- **New Hampshire clearly defines acceptable emergency response times**
- **New York doesn't allow operators to down grade leaks** (Federal Government has no provision to grade leaks)
- **Virginia is requiring one operator to RFID new construction and repairs** (Federal Government doesn't even mention RFIDs)



# Some Examples of State Safety Initiatives

- **Oregon has a landslide protection program because they get so much rain** (Fed Government no such provision)
- **Washington has as requirement for cathodic protection readings on all exposed pipe when coating is damaged.**
- **Kansas requires inspection of outside contractors (quality assurance)** (PHMSA is currently having workshops on this at this time)
- **Texas requires all Grade 3 leaks repaired within 36 months** (Federal Regs says the leak can remain forever)
- **Arkansas requires anodes be shown on all maps** (Federal Government does not)
- **Mississippi requires of certain operators 100 hours of training (classroom + field)** (Fed Regs have no such provision)

# Some Examples of State Safety Initiatives

- **South Carolina requires outdoor meters unless impractical** (Federal Regs has no such provision)
- **Idaho requires NFPA 54 compliance before providing gas** (beyond jurisdiction of Federal Regs )
- **Illinois requires training program not just the minimum** Operator Qualifications of Federal Government
- **Wisconsin requires special precautions if overhead electric transmission lines are nearby** (Fed Regs discuss in Advisory Bulletins)
- **New Jersey requires depth of cover 50% deeper than** Federal Regs



# State Program Safety Topics

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to CPUC and other States**
3. Path Forward – Where do States need to  
improve?

# San Bruno CA, - Devastated Neighborhood, Loss of Life



## San Bruno, CA – Incinerated Remains of Vehicles



# NTSB Findings/Recommendations as relates to CPUC and other States

Pacific Gas and Electric Company  
Natural Gas Transmission Pipeline Rupture and Fire  
San Bruno, California  
September 9, 2010



**Accident Report**

NTSB/PAR-11/01  
PB2011-916501



**National  
Transportation  
Safety Board**

**NAPSR  
NATSR**

# NTSB San Bruno Incident Sept 2010 -28 Findings as it relates to Operator, State Regulator, Federal Regulator

- **Findings 1-23 have specific findings about**
  - **the Cause of the incident**
  - **Lack of contingency plan for associated work on nearby pipeline facility**
  - **No incident command system used for control center**
  - **Scada system contributed to added to delays in response**
  - **Use of Automated and Remote Control Valves would have reduced impact**
  - **Excessively long response times experienced**
  - **Ineffective public awareness plan**
  - **Ineffective post accident for drug & alcohol testing**
  - **Deficient Integrity Management Program with Inadequate Record Keeping and treatment of unstable threats**



# NTSB Findings

**24.** The Pipeline and Hazardous Materials Safety Administration **integrity management inspection protocols** are inadequate.

**25.** Because PG&E, as the operator of its pipeline system, and the California Public Utilities Commission, as the pipeline safety regulator within the state of California, **have not incorporated the use of effective and meaningful metrics** as part of their performance -based pipeline safety management programs, neither PG&E nor the California Public Utilities Commission **is able to effectively evaluate or assess the integrity of PG&E's pipeline system..**

# NTSB Findings

**26.** Because the Pipeline and Hazardous Materials Safety Administration has not incorporated **the use of effective and meaningful metrics as part of its guidance for effective performance-based pipeline safety management programs**, its oversight of state public utility commissions regulating gas transmission and hazardous liquid pipelines needs improvement.

**27.** The **ineffective enforcement posture** of the California Public Utilities Commission permitted PG&E's organizational failures to continue over many years.

**28.** The Pipeline and Hazardous Materials Safety Administration's enforcement program and **its monitoring of state oversight programs** have been weak and have resulted in lack of effective Federal oversight and state oversight exercised by the California Public Utilities Commission.

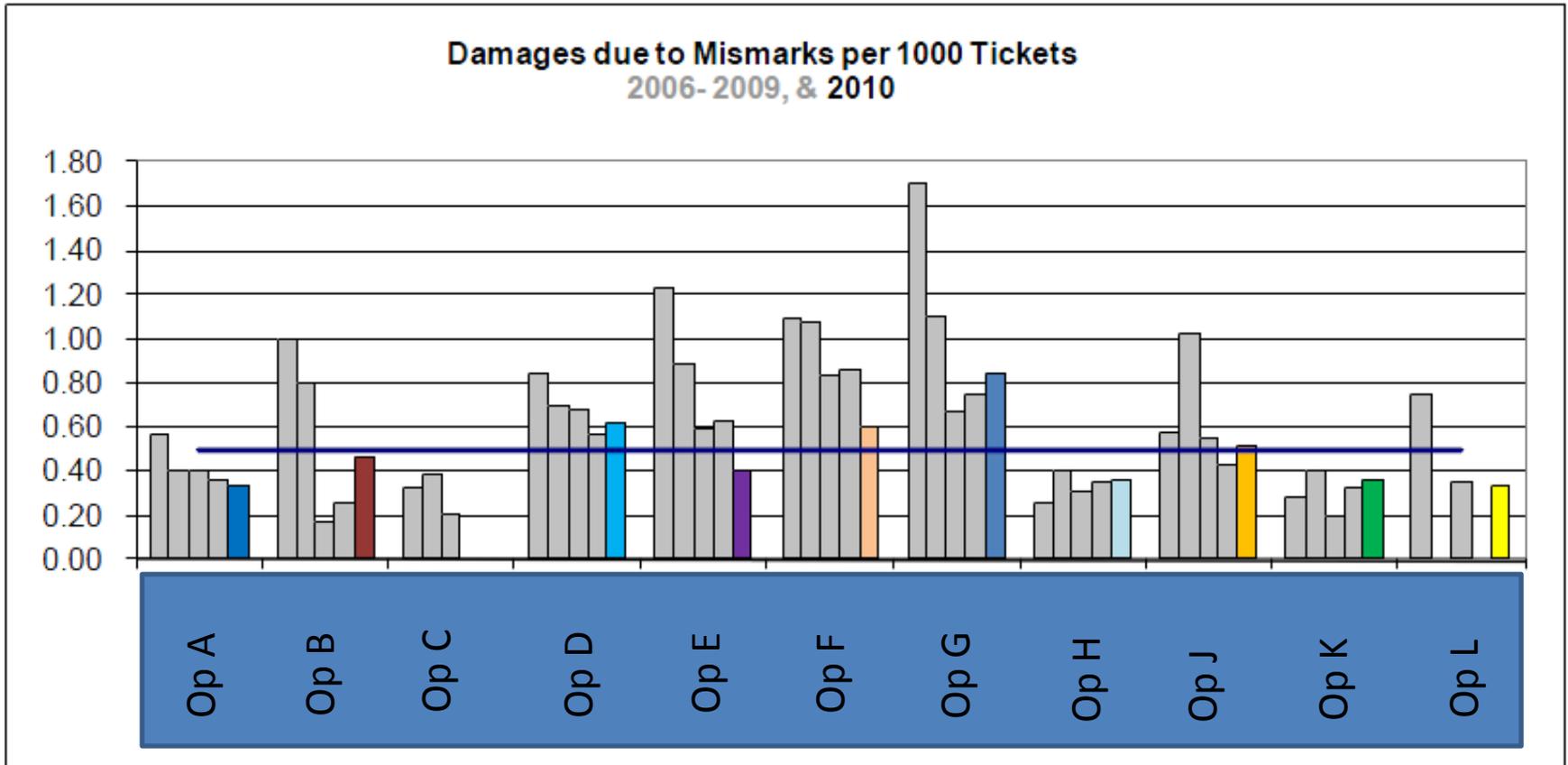
# NTSB Findings

In summary, PHMSA should develop an oversight model that allows auditors to more accurately measure the success of a performance-based pipeline integrity management program. Specifically, PG&E should develop, and auditors should review, data that provide some quantification of performance improvements or deterioration, such as

- **the number of incidents per pipeline mile or per 1,000 customers;**
- the number of missing, incomplete, or erroneous data fields corrected in an operator's database;
- the response time in minutes for leaks, ruptures, or other incidents; and
- the number of public responses received per thousands of postcards/surveys mailed.

Such metrics would allow a comparison of current performance against previous performance

# Meaningful Metric Examples -NY



**Figure #5** - *Mismark Damages per 1000 Tickets Statewide*

# NTSB Findings

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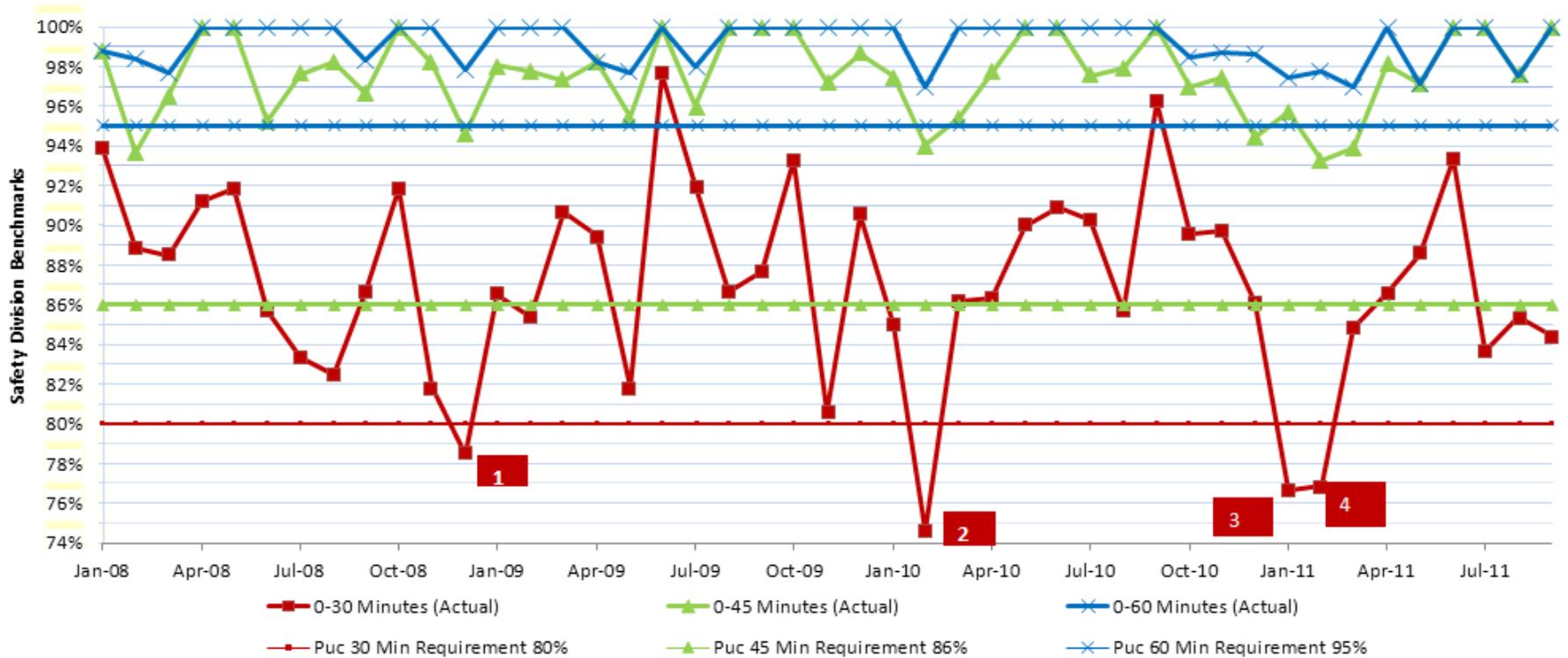
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Such metrics would allow a comparison of current performance against previous performance

# Meaningful Metric Examples NH

## Operator A Gas Response Times during After Business Hours

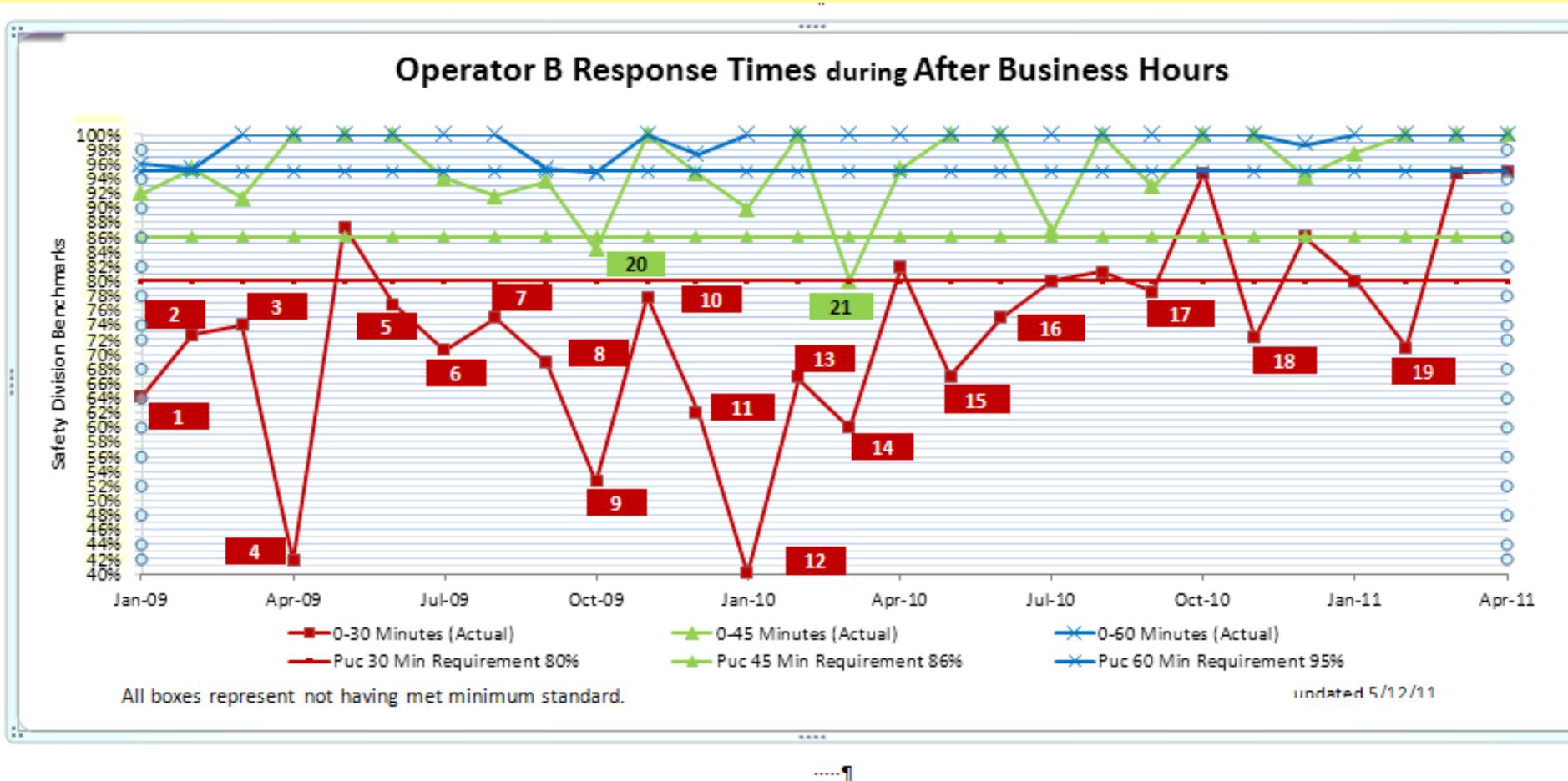
Updated 10/17/11



All boxes represent not having met minimum standard.

Chart Area

# Meaningful Metric Examples NH





# Path Forward- Where can States find areas to Improve?

- Increased Transparency – Results of Inspections, Summaries, Enforcement Actions
- Consistently enforce existing rules
- Continued Pipeline Replacement Programs – Engagement with Commissioners and integrate Safety Regulation with Economic Regulation
- Improve/Refine State Pipeline Safety Rules as applicable
- Share State Regulatory Best Practices
- Incorporate Feedback of all Stakeholders