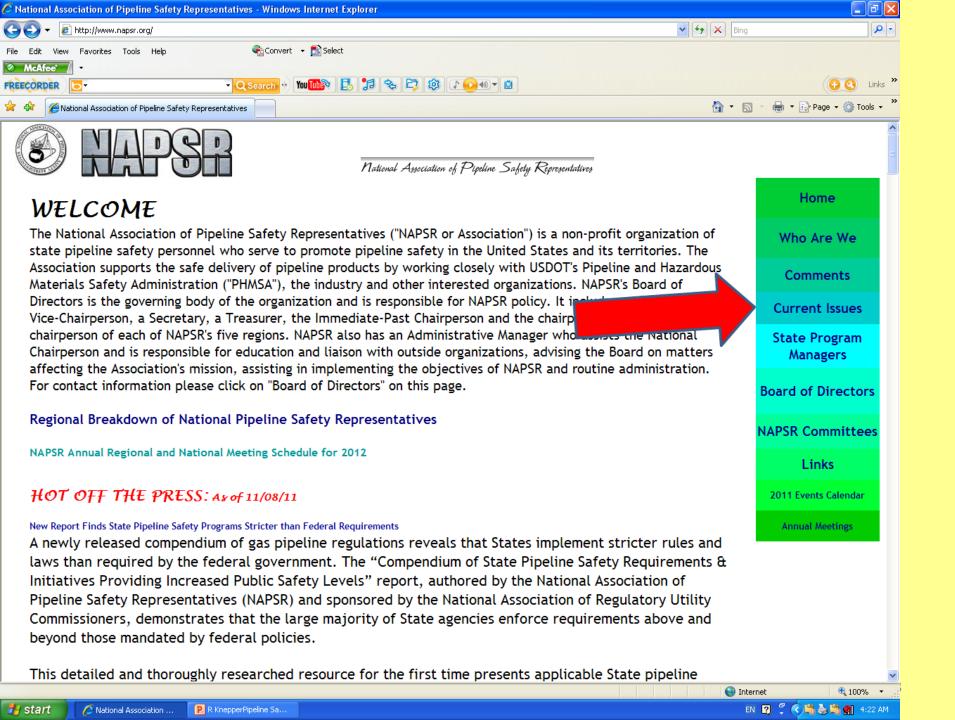
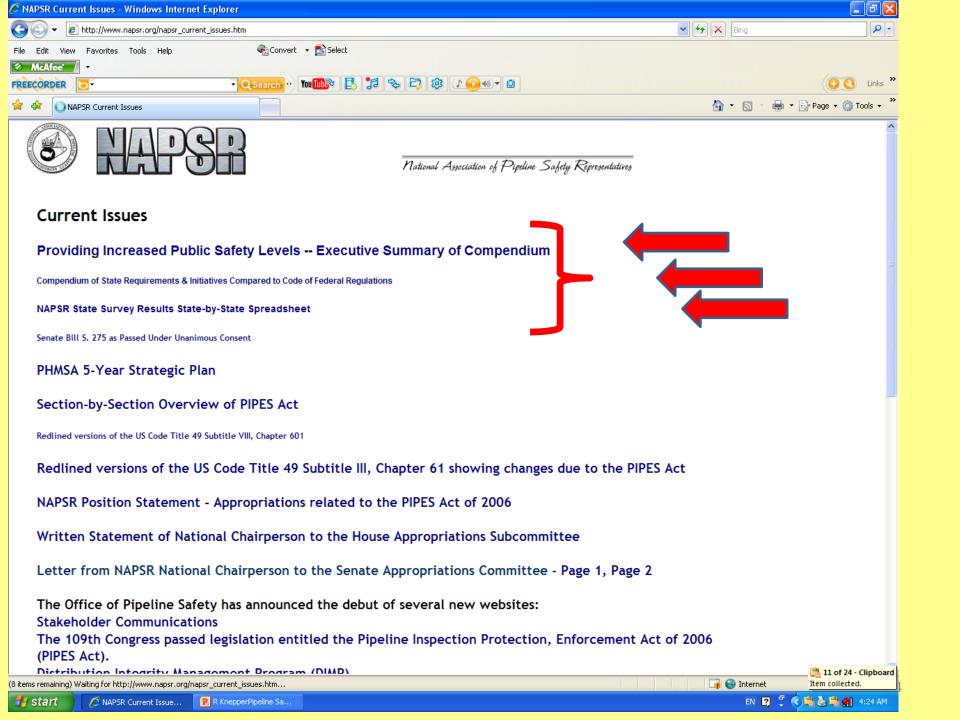


State Program Safety Topics

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







New Publication sponsored by NAPSR & NARUC

Found at

http://www.napsr.org/
napsr_current_issues.htm

ALSO Found at: http://www.naruc.org/committees.cfm?c=51#



1st 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



9/30/2011

National Association of Regulatory Utility

Commissioners





State Pipeline Safety Initiatives that Exceed	۷.	_ *	a M	2	FICUT	T OF COLUIM	EGE .						ğ	V,		Q	HUSETTS	8	MT.	E .	, 5	5	MPSHIRE	SEY	ХІСО	RK	AROLINA	MIONN	WA	LVANIA	RICO	SLAND	AROUNA	100		ı	Ŀ.	GTON	RGINIA	NIS	22	of Intitiative pory	ofStates will es in pory
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Federal Code	AL.	ARI	3	8	8	DE	DE	OB)	M	1	2	5	Ken	PO	MA	MA	MAS	MIG	Ĭ.	N 2	Š	9		ME	M	NEA	ON S		9 8	PEN	F	EHC	os s	T N	TEX	MA.	VE	W.	WES	WE	Š	a de	S E E
Number of State Initiatives	5 3	39 4	9 26	5 11	48	14	4 5	3 12	6	11 2	21 1	1 4	7 19	7	76	12	11	79	30	5 68	8 0	3	3 46	51	8	63	17 (8 (8 9	10	0 1	18 2	3 0	11	30	0	8 3	1 57	7 5	69	12	1154	
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Incident reporting criteria - lower property damage threshold		2 1	1 2			1	1	1	Ш		_	1	1					1		1		Ш	1 1	1	1	1	1	Ш	1 1			1	1		L	Ш	1 1	1 1	L		1	26	24
Incident reporting criteria - one hour or two hour notification	Щ	_		1	1	1	_	1	Ц	4	4	_	\perp	2	1	Ц	4	_	1	1	Щ	1	┸	┸	Ц		4	Ц	1	Ш	Щ	4	_	\perp	┸	Ц	\bot	2	1		Ц	13	11
Incident reporting criteria - significant media coverage		1	1	┸		Ц	_		Ц	4	1	4	_	┖	Ц		4	1		┸	4	Ц	┸	┺	Ц	1	4	Ц	4			1	4		┺	Ц	4	1	┸		Ц	7	7
Incident reporting criteria - bodily injury includes outpatient treatment		1	1			Ш			Ш		Ш											Ш	┸	┸	Ш		\perp	Ш	┸			1			┸	Ш	\perp	\perp	┸		Ш	2	2
Expanded reporting criteria - includes any pipeline > 100 ppm H2S; any carbon monoxide related events, over pressuring pipeline, fire not caused by operator, transmission shundown, failure to serve master meter ops, > 5 gallons release of Haz liquid		5 1	1										1					1				1				1												1				11	7
conditions, 3rd party damage reporting , unplanned interruptions, safety index report, building evacuations, major main failures, transmission failures, list of master meter operators served, suspicious acts, status of condition of pipe and shared with municipalities served, annual organizational chart, annual report for master meters, report of any unplanned gas ignition		1 1	1 1	4	4				1	1 :	2	1	1 4		4			1	3	1 2	2		3	1	3	1			1			1		1	1		1	1 7		2	2	56	28
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Inspection Progress Reports for Regulator Stations, Emergency Valves		Т		П	2	П	Т		П	П	Т	Т		П			П			Т	Т	П	Т	Т	П		Т	П	Т			Т	Т		Т	П	Т	Т	Т		П	2	1
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Public Awareness Plans must be filed/approved						Ш									1					1																	1	1			Ш	3	3
Operator Qualification Plan must be filed/approved						Ш			П	_	_				1					1																	\perp				Ш	2	2
Quality Assurance Plan must be filed/approved						Ц			Ш	4					1							Ш			Ш		_	Ш								Ш	\perp				Ш	1	1
Integrity Management Plan must be filed/approved						Ш			Ш	\perp					1					1		Ш			Ш			Ш								Ш	\perp	\perp			Ш	2	2
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Damage Prevention Plan must be filed/approved						Ш			Ш						1					1																	1	1			Ш	3	3
Provide Contact List for emergencies to Safety Inspectors, for resolving and providing situational awareness regarding service Interruptions		I				1	Ι			\perp	I					1		\Box	1	Ι	I		I				1		I				1	1			1	1			1	9	9
Annual Reporting of List of Welders and Certification of Welders																																	1									1	1
Reporting of Response Times Emergency/Odor Complaints/Leaks									\Box						1				1	1		\Box	1			1						1				П			L			6	6
Annual Report for Operation and Maintenance Activity Hours															1								1																			2	2
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1 of 12 1st Edition Compiled by National Association of Pipeline Safety Representatives (NAPSR) revised Sept 2011





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

- 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?





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





PB2011-916501





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





- 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..



- 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.



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

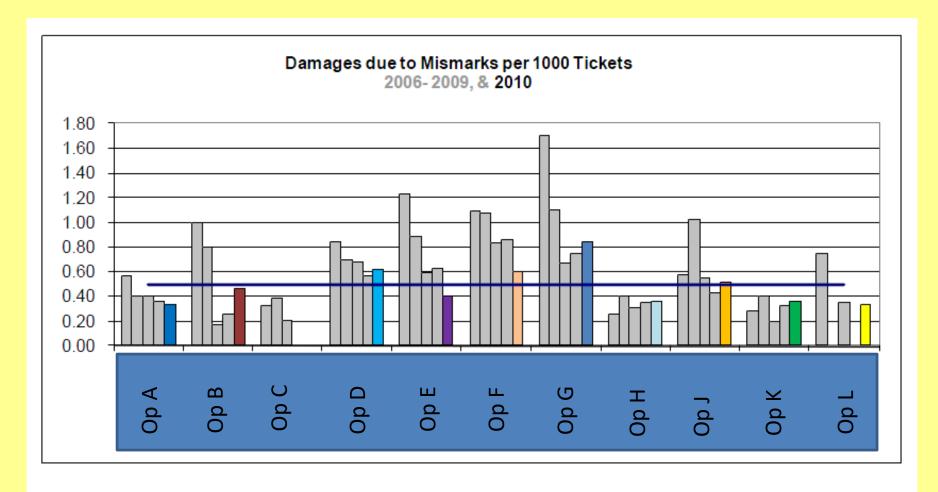


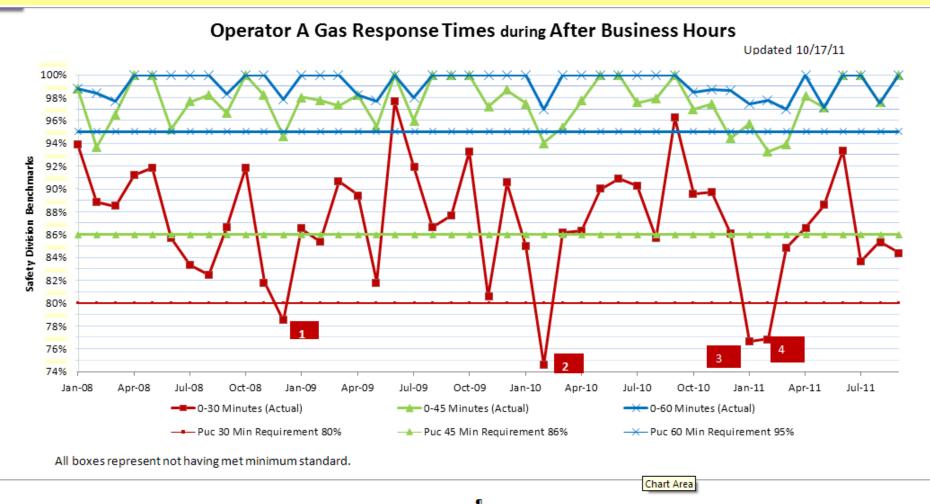
Figure #5 - Mismark Damages per 1000 Tickets Statewide

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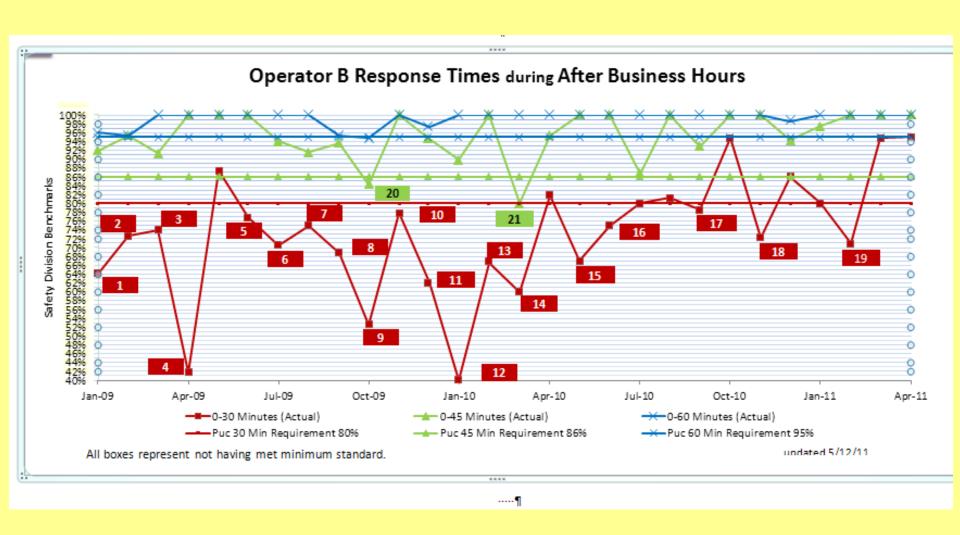
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Meaningful Metric Examples NH



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