						_																																	=	
			A		SUT	Jr COLOMBIA										MASSACHUSETTS		Α :	_			NEW HAMPSHIRE	X	03	ROLINA	NORTH DAKOTA	_	REGON ENNSYLVANIA	00	AND	SOUTH CAROLINA SOUTH DAKOTA	m				ON SINIA			Number of Intitiatives in Subcategory	Number of States with Intitiatives in Subcategory
State Pipeline Safety Initiatives that	MA NA	VSAS	JRNI	ADO	CTIC	VARI	DA	IA	2	3 ≱		SI	JCKY	ANA.	LANE	CHO	GAN	SOT		UKI	SKA	IAME	ERSE	TEXT(H CAI	H DA	MOI!	NO SYLVA	'O RI	EISL	I CA	SSE		LNC	ΑIΑ	INGT VER(NSIN	ING	er of tegor	er of tives tegor
Exceed Federal Code	ALABAMA ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	CONNECTICUT	DELAWARE	FLORIDA	EORG	IDAHO II I INOIS	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MARYLAND	ASSA	MICHIGAN	MINNESOTA	elect	MISSOURI MONTANA	NEBRASKA	EW H	NEW JERSEY	NEW MEXICO	ORTH	ORTH	KLAF	REGC ENNS	PUERTO RICO	RHODE ISLAND		TENNESSEE	TEXAS	UTAH VERMONT	RGIN	WASHINGTO	WISCONSIN	NY OMING	umbe	umb titia ibcat
Number of State Initiatives	5 39			ა 11		4 4	Ξ	12	6 1	1 2	<u>≅</u> 111	¥ 47	<u>⊻</u> 19	7 7						8 8					2 3 17	2 c	8 8	o	<u> </u>				₽	⊃	⋝ 31 !	<i>></i> ≥ 5 5 5	69		รัฐ 1154	ZES
Enhanced Reporting	5 5.	, .,	20		10 1		55		0 1			17	-/		0 1.	- 11	,,			,0 0		, 10	01	0 0	3 17		, 0	7 10		10 2	.5 0		50	0	J1 .	37 3	0,		261	
Incident reporting criteria - lower property damage threshold	2	2 1	2			1	1	1			1		1				1			1	1	1 1	1	1 1	1	Ħ	1	1		1	1			1	1	1		1	26	24
Incident reporting criteria - one hour or two hour notification			┰	1	1 .	1	•	1			Ť			2	1			1		1	1	<u> </u>	Ė			П	1		П	Ť						2		H	13	1
Incident reporting criteria - significant media coverage	1		1	Ė						1				_			1				Ħ			1			Ħ			1						1			7	7
Incident reporting criteria - bodily injury includes outpatient treatment		1																									П	+	П	1									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 shutdown, failure to serve master meter ops, > 5 gallons release of Haz liquid	5	5 1											1				1				1			1												1			11	7
Additional reporting rqmts - non-incident including: safety related 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	4	4					1 2		1	4	4	4		1	3	1 :	2		3	1	3 1			1			1		1	1	1	1	7	2	2	56	28
Require reports of outages of >specified number of customers				1			1			1	1		1	2	2		1	1				1	-	1	1			1 1		1	1	1	1			1	1	1	23	
Periodic leak status reports					4		1							•	1					1		1	2												1				11	7
Inspection Progress Reports for Regulator Stations, Emergency Valves					2																																		2	1
Aging Workforce Succession Report					1																					П			П										1	1
Cast Iron/Bare Steel Replacement Reporting					2													1																					3	2
Plastic pipe inventory, Plastic failure reporting, Construction Defect Failure Reporting															1			1				1														1			4	4
Pressure Complaints (too low/too high)																						1								1									2	2
Electronic Access to Most Current O&M, Procedures, OQ																		1				1																	2	2
Operation & Maintenance Plans must be filed/approved	1 1	1			1 '	1			1	l 1		1		•	1		1	1		1		1	1	1 1							1				1	1 1	1		21	21
Emergency Response Plans must be filed/approved	1 1		1		1					1		1		•	1			1		1		1	1								1					1	1		14	14
Public Awareness Plans must be filed/approved														•	1					1															1				3	3
Operator Qualification Plan must be filed/approved														•	1					1																			2	2
Quality Assurance Plan must be filed/approved														•	1																								1	1
Integrity Management Plan must be filed/approved														•	1					1																			2	2
Construction Standards must be filed/approved							1							•	1			1		1																1			5	5
Damage Prevention Plan must be filed/approved														•	1					1															1				3	3
Provide Contact List for emergencies to Safety Inspectors, for resolving and providing situational awareness regarding service Interruptions						1									1			1							1						1	1		1		1		1	g	9
Annual Reporting of List of Welders and Certification of Welders						Ш						Ш		\perp					\perp		Ш			Ш		Ш	Ш		Ш		1			Ш					1	1
Reporting of Response Times Emergency/Odor Complaints/Leaks														•	1			1		1		1		1		Ш	Ц			1									6	6
Annual Report for Operation and Maintenance Activity Hours												Ш		•	1				\perp		Ш	1		Ш		Ш	Ш		Ш		\perp			Ш					2	2
Pressure Test (Strength Test) Report with Certification of Pipeline																							1			Ш													1	1
Any record of required tests, summaries that Commission requests					1							Ш							\perp		Ш			Ш		Ш	Ш		Ш		\perp			Ш					1	1
Requires notification of change of ownership, merger, acquisition				Ш	2													1								Ш	1		Ш										4	3
Projects, Extensions, Improvements to Capital of Gas Utility	1				1		1			1		1		2 '	1	1		1 '	1			1		1	1	Ш	Ш		Ш				3		1	2	1	1	23	1
More Direct Oversight				Ш																						Ш	П		Ш					Ш					87	
Definition of Operator Expanded includes: pipeline operators that contain >100 ppm H2S, H2S operators must use NACE Standard MR-0175-99 and API RP55-95,	1	1															1																						3	3
More direct oversight of construction activities (or reports to allow same)	1			1	2			1				1	1	•	1 1			1				1	1	1	1		1	1		1	1	1	1		1	1 2		1	25	23
Definitions expanded for "transport" "persons" "operator" and "master meter" "state" "distribution system", "low pressure distribution system", "master meter system" "Crorosion", "Customer", "Hoop stress", "Leak", "Leakage survey", "Pressure", "Sour gas", "System", "Vault" "feeder line" "high pressure distribution", "yard line", "CGI", "sustained reading", "follow up inspection"	6	5					3										9		1	2																			30	4
Conversion procedures required fron non regulated to regulated operator							1																			Ш													1	1
Requires Lab Exams for Investigating Failures	1																									Ш	Ш		Ш										1	1
More direct oversight of testing (>100 psi) (or reports to allow same)													1										1	1	1	\prod										1			5	5
Certificate Required for Operations or Certain New Construction		2																					1								1								4	3

					BIA																													s in	ч
				E	DISTRICT OF COLUMBIA									STTE					HIRE			HINA	NI N		AII 6	9	LINA	ИА				N NIA		ıtitiative	Subserve gory Number of States with Intitiatives in Subcategory
State Pipeline Safety Initiatives that	AMA	ARIZONA ARKANSAS	CALIFORNIA	COLORADO CONNECTICUT	ист оғ	DELAWARE FLORIDA	GIA	SIG	NA	SA	KENTUCKY	LOUISIANA	MARYLAND	MASSACHUSETTS	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA NEBRASKA	DA HAMPS	ERSEY	NEW MEXICO	H CAR(OHIO	HOMA	PENNSYLVANIA PITERTO PICO	E ISLAI	SOUTH CAROLINA	H DAK(ESSEE	10	UTAH VERMONT	NIA	WASHINGTON WEST VERGINE	WISCONSIN	Number of Intitiativ Subcategory	er of St itives in tegory
Exceed Federal Code	ALABAMA	ARIZONA ARKANSA	ALIF	OTO	ISTF	DELAWAR FLORIDA	EOR	IDAHO ILLINOIS	NDIA	IOWA	ENT	LOUISIA	TARY	IASS	N	IISSI	IISSC	EBR	EVA EW]	EW]	EW]	ORT	HIO	REG	ENN	HOD	TUO	ENN	EXA	TAH	VIRGINIA	VASH VEST	VISC	umb	umb ntitiz
Number of State Initiatives	5 3	< < 89 49	26	11 48	14	4 53	12	6 11	21	11 4	. ≚ 7 19	7 7	2 ≥ 6 1:	2 11 7	2 ≥ 9 30	5	<u>≥</u>	$\begin{bmatrix} 2 & 2 & 2 \\ 0 & 3 & 3 \end{bmatrix}$	3 46	51	8 63	3 17	0 8	8 9	10	18	23	0 11	30	0 8	31 5	> > 57 5	69 12	1154	N E S
Notice to State Safety Staff of consultants doing routine work to allow closer oversight										1	l																								1 1
Limits span of control for oversight of outside contractors crews					1	1													1															5	3
Emergency Procedures must recognized sour gas safety precautions including educating public, Emergency Program requires annual meeting with Emergency Responders on Emergency Procedure			1											2	2			Ш					Ш											;	3 2
Require Inspections of outside construction crews (quality assurance) Amendments of OQ, O&M plans required after incidents, AOC discovered, emergency				1						1		2	2						1	2														7	7 5
repairs made, require OQ and O&M plans on sight during construction				1	1																													1	2 2
Advisory Bulletins must be incorporated into action plans				1																														1	1 1
Visual Weld Inspectors must be previously identified in writing		1																																1	i 1
Valves																		$\perp \Gamma$					Ш				\Box							37	
Valve Box Criteria (accessiblity,non transmittal of external loads, free of debris)												2	2																				1	1	3 2
Bypass Valves must be sealed and locked Blow-down valve requirements for mains, Sectionalizing block valves requirement for sour gas pipelines						1									ı																		1	1	2 2
Non Emergency Valves must be inspected every 5 years													1										П	П											1 1
Emergency Valves must be accessible at all times						1							1				1																1	,	4 4
Emergency valve program, selection criterion for service valves, enhanced inspection, annual dril on operating emergency valves, emergency valves inspected every 6 months for sour gas, specified design requirements for sour gas						1							1	2	2		1		1	1	2											2		11	1 8
Buried Curb Valves required on all high pressure service lines at places of public assembly, installation of curb valve when repair excavation is made														1						1	1													:	3 3
Curb Valves must be inspected annually at places of assembly, public assembly places require outside valve																					1									1			1	:	3 3
Service shut-off valve criteria, Check valve required for certain services						1			1						I						1											1	1		6
Periodic service must include partial stroke															1		1																	;	3 3
Pressure Testing																																		20	f
Additional requirements for Uprating for determining MAOP						1				1		-	1				1				1											1		f	ŝ 6
All service lines must be pressure tested to at least 90 psig														1																					1 1
Requires test pressure for transmission pipelines be maintained for a period of 24hrs, requires specified time period for pressure testing, requires independent witness of test, increased frequency			3												ı					1			П												5 3
No Pressure Testing allowed against a live operational valve									1																										1
Requires Pressure Testing to more than 50% for certain operating pressures or more stringent minimums										1					2						1												3		7 4
Operating Pressure																																		30	1
More restrictive limits on operating pressure		1						1			2						1		1	1	1				1	1							3	13	3 10
Multiple Pressure Recording Devices required per system, Recording device needs to be portable																											1								1 1
Meters cannot be operated above specified % of pressure test					1													\perp					Ш	\perp			1		\sqcup						2 2
Max actual operating pressure must be < MAOP (cannot equal)		1																					Ш	Ш										1	1 1
Add 'l reqmts for overpressure protection, more frequent inspection cycles	1														Ш		1	$\perp \perp$			2		Ш	\perp											5 4
Restrictive test requirements for low-pressure line																							Ш											(0
Max pressure limit on cast iron pipe							Ш							4	Ц			$\perp \perp$					Ш	\perp					\sqcup				1		2 2
Tag/post pressure reliefs with setpoint and downstream MAOP																							Ш											1	1 1
Mains >200 psi, 125 psi must meet transmission requirements																		$\perp \perp$					Ш	Ш					Ш						0 ر
District Regulator Stations required to be inspected monthly by operator				1																			Ш											1	1
Must notify if low-pressure system exceeds 0.5 psi																		$\perp \perp$	1		2		Ш	\perp									1		4 3
Damage Prevention																																		49	1

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			A .	CUI DFC	ш									SET	٧	_			JEHI SC	.≾	8 .	ROLI	KOT		ANIA	AND	30LI	KOT/				ON CINIZ	-		Intit	Number of States v Intitiatives in Subcategory
State Pipeline Safety Initiatives that	NA	NSAS	ORNI	ICT	WAR]	Y Y		SIS AN		SI	IANA	fe1	LANI	ACHIL GAN	SOT	SSIPF	URI	ANA	DA TAMI	ERSE	4EXI	н СА	H DA	N C	XIT X	EISL	I CAI	H DAI		ONT	NIA	ING	NSI	IING	er of tegoi	er of tives tegoi
Exceed Federal Code	ALABAMA ARIZONA	ARKANSAS	COLORADO COLORADO	ISTR	DELAWARE	EOR	ЮАНО	ILLINOIS	IOWA	KANSAS	KEN I UCKY LOUISIANA	MAINE	MARYLAND	MASSACHUSETTS MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA NEBRASKA	NEVADA NEW HAMPSHIRE	NEW JERSEY	NEW MEXICO	ORT	NORTH DAKOTA OHIO	KLAI REG	PENNSYLVANIA	PUEKTO KICO RHODE ISLAND	TLOO	SOUTH DAKOTA TENNESSEE	TEXAS	UTAH VERMONT	IRGII	WASHING WEST VER	WISCONSIN	WYOMING	umb	umb ntitia ubca
Number of State Initiatives	5 39		26 11 4	8 14	4 5	3 12	6 1	= = = 1 1 2:	1 11	¥ ± 47 1	9 7	≥ 76				<u>≥</u>						2 3 17	08	8 9	10	18	23	o 11	30	⊃ > 0 8	31 5	> > 57 5	69		1154	SIN
							П									П		П									П		П							
Enhanced damage prevention requirements for pipeline operators such as: can only be member of single or specified One Call Ctr, must oversee all transmission line excavations and document all findings, extending trainining to local community colleges, pilot new technologies, transmission line and certain deistribution line require enhanced marking and indentification at specific locations, must monitor all excavations of sour gas				2		1								1	1					1											2		3		11	7
Identification tape above trench-installed				1 1								1	1	1						2															7	6
Tracer wire requirements, RFID Electronic ball requirements	1				1							1								1				1							1		1		7	7
Damage prevention performance limits in rates																					1														1	1
Enhanced public notification and identification rqmts				1										1			1														1				4	4
Enforcement authority				1				1		1		1			1				1	1						1									8	8
Geohazard program							Ш	\perp										Ш						1					Ш						1	1
Some CGA best practices required						2	Ш			1		1															Ш		Ш	Ш					4	3
Trenchless installations per GPTC Appendix G-192-6							Ш	\perp				1						Ш											Ш						1	1
Locators to be knowledgeable of Trenchless Technology Techniques, Incorporate Trenchless techniques into procedures												1			1																1				3	3
Locators to Trained to a minimum requirement (NULCA or equiv)																П			1										П						1	1
Limits Locators to in house (no outside contractors)																			1																1	1
Training/Quals (not including OQ)							П																												10	
Certification/extra training/including more frequent for polyethylene/plastic		1										1																							2	2
Leak Surveys need Trained Personnel regarding equipment and Classification Procedures		1					П																													1
Training required for all opeartions of sour gas including employee safety		•												1																					1	1
Training required for Flow Reduction or Flow Interruption during Emergency							+++													1															1	1
Training required for Vegetation Management Leak Surveys										1										†															1	1
Training Required of External First Responders										•													$\dashv \dagger$								1				1	1
Exams/training rqmts for system managers, enhanced training program required								1								1						1									Ť				3	3
Operator Qualification								•								H						•													7	
Additional Requirements for OQ Traniners and Evaluators																	1																		1	1
Additional Knowledge/Skill/Ability Demonstration																	1						$\dashv \dagger$												1	1
OQ evaluation must include training																	1																		1	1
OQ extended to cover construction					1		+++										•		1												1	1			4	4
Meter Location/Protection																															Ť	•			27	
							+++	4						1							1						4									
Meters/regulators must be outside (unless impractical)								1							1					1	1						-				1	1			4	4
Physical protection for meters Residential services must be near bldg walls; no downstream buried pipe except outdoor								1							1					1											-	1			6	6
services				1		_		_				1	2								1														5	4
Relocating meters from property line to building wall							Ш												1													1			2	2
Customer Meters must be protected from snow and ice damage								1				1			1																				3	3
Master Meters no longer allowed				1								1								1			$\perp \downarrow \downarrow$				Ш								3	3
Meters must be replaced every 10 years																				1								1		\perp					1	1
Operator responsible for service lines regardless of meter location				+		+	\sqcup					1				Ш	1	\blacksquare	1			H		+			Н		Ш	\blacksquare	4	_	Н	4	3	3
Odorant																																			35	
Increased testing frequency of odorant		1		1						1 1	1 1	1				Н	2	\blacksquare		1			\perp				Н		2	\blacksquare		1	Ш		13	11
Odorant tests locations specified at furtherest point from source		1								4	1		4	4										_											2	2
Lower limit for odorant				+		1	\sqcup			1			1	1		Ш		\blacksquare			1	H		+			Н		Ш	\blacksquare	4		Н	4	4	4
Odorant requirment for transmission line																	4				.											4			1	1
All intrastate lines must be odorized							+		1								1	\blacksquare			1						\square		H	+	_	1			3	3
Prompt action for insufficient odorization									1											4	1								4			1			3	3
Equipment requirements							+											\blacksquare		1							\square		1	+					2	2
Farm tap requirements		1																		4									1						2	2
More specific reporting				+		+	\sqcup									Ш		\blacksquare		1		H		+			Н		Ш	\blacksquare	4	1	Н	4	2	2
Limit for odorant throughout system																				1															1	1

State Pipeline Safety Initiatives that Exceed Federal Code	ALABAMA	ARIZONA	ARKANSAS CALIFORNIA	COLORADO	CONNECTICUT	DISTRICT OF COLUMBIA	DELAWARE FLORIDA	GEORGIA	DAHO	INDIANA	IOWA	KANSAS	KENTUCKY LOUISIANA	MAINE	MARYLAND	MASSACHUSETTS MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	NEBRASKA	NEW HAMPSHIRE	NEW JERSEY NEW MEYICO	NEW YORK	NORTH CAROLINA	NORTH DAKOTA DHIO	OKLAHOMA OREGON	PENNSYLVANIA	PUERTO RICO RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA TENNESSEE	TEXAS	VERMONT	VIRGINIA WASHINGTON	WEST VERGINIA	WISCONSIN WYOMING	Number of Intitiatives in	Subcategory Number of States with Intitiatives in Subcategory
Number of State Initiatives	5		9 20	5 11	48	14	4 53	3 12	6 11	21	11	47 1	19 7	76					68	3 3	3 46	51 8	63	17	0 8	8 9	10	0 18	23	0 11	30 (0 8 3	31 57		69 12		
Sniff Test required for service calls entering buildings												1													П												1 1
Increased testing requirements of Odorant for Master Meter Operators	П		1																						П						П			П			1 1
Leak Tests																																				75	5
Define Business District, Define Impractical to survey, Define High Occupancy Structure						1				1		1		1							1												2				7 6
Vegetation Surveys prohibitied as leak survey for all pipelines		1																											1								2 2
Additional surveys for Public Buildings inside and out			1			1								1							1				П		П				П			П	1		5 5
Additional surveys for mains on structures (bridges)																					1																1 1
Enhanced Leak test requirements services- frequency												1							1						П		П		1				2		1		6 5
Enhanced Leak test requirements mains: -requires higher frequency, apply to Master Meter Operators		1 :	2 1									1		1	1	1			1																3	1	12 9
Increased patrol frequency for mains/feeders												1				2			1						П		П										4 3
Leak check for customer lines (on startup)									1	1	1				1	1			1										0								6 6
Additional leak surveys for inactive services																									П		П		1		П			П			1 1
Flame ionization surveys of bare steel mains if electrical survey impractical (defined)												1											1														2 2
Leak Test Procedure must ensure discovery of leaks			1																1																1		3 3
Additional Leak Test on Services after 3rd Party Damage																			1														1				2 2
Additional Leak Test required where 3rd Party Excavations near pipeline such as under pavement, road substructures																																	2		2		4 2
Enhanced leak test rqmts - pressure/duration			1													1																					2 2
Additional surveys - cast iron (winter and non winter)												1		1							1						1						1				5 5
Acceptable test equipment specified and calibration requirements		1 :	2				1					1		1	1							1													1		9 8
Risk-based model for survey frequency																															1						1 1
Test and repair all leaks before operating >30% SMYS																1																					1 1
Repair all leaks found in uprating tests	\prod							1 T								1							1						ΙŢ								2 2

					LUMBIA										Š					9			ΑA	_				V.								atives m	s with
		76	ĕ	CUT	OF CO	zi						S .	_	۵	MASSACHUSETTS MICHIGAN	Ą	Ы			NEVADA NEW HAMPSHIRE	EY	03	ROLIN	OHIO	4	ANIA	AND	ROLIN	TENNESSEE			NOI	GINIA	z	1	Number of Intitiativ Subcategory	Number of States v Intitiatives in Subcategory
State Pipeline Safety Initiatives that	ALABAMA ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	DISTRICT OF	WAR IDA	GIA	0	OIS		AS.	KENTUCKY	E E	MARYLAND	MASSACHU MICHIGAN	MINNESOTA	MISSISSIPP	MISSOURI	MEBRASKA	DA HAM	NEW JERSEY	NEW MEXICO	н са	уд Н.	ON	SYLV	RHODE ISLAND	H CA	H DA	s _	VERMONT	INIA	WEST VERGI	WISCONSII	Ĭ	tego	ative: tego
Exceed Federal Code	ALABAMA ARIZONA	VRKA	ALIF	OTO	IL	DELAWAI FLORIDA	EOR	ІРАНО	ILLINOIS	IOWA	KANSAS	ŒNT	LOUISIA	MAR	MASS MICH	IIN	AISSI	AIISS(EBR	NEVADA NEW HAN	VEW	VEW VFW	VORT	VORT	REG	ENN	SHOI	TUO	FENN	FEXA	ÆR	/IRG VASE	WEST	VISC AYO		ubca	fumi ntiti subca
Number of State Initiatives	5 39			1 48	14	4 53	12	6 1	11 2	1 11	47	19	7 76					68	0 3				3 17	0 8 8	9	10 0	18	23	0 11	30 (8 3	1 5	7 5	69 1:		154	0,
Response to Leaks																																				52	
classification/repair rqmts for leaks	1	2	1	1		1 1	1		1		1	1	1		3			1		1		1 1						1	1	1		1				24	21
All leaks treated as emergency						1				1					1						1	1	1							1		1				8	8
All leaks treated as failure including root cause determination											1																									1	1
Specified Time Frame to respond to reports of leaks		2		1						1	1		1					1		1		1														9	8
Leak inventory limits				1																		1														2	2
Upgrading/Downgrading of Leaks Prohibited or Restricted													1									1										1				3	3
After Repair of Leaks Post Survey Required													1									1														2	2
Class 1 Leaks require notification to local Fire Dept													1																							1	1
Address class B or Class 2 more frequently													1								1															2	2
Replacement Programs																																				57	
Cast/bare steel replacement programs (rate relief)		1		1			1	П			1		1		1					1					1	1	1						П			12	11
CI/bare steel/copper replacement program (no rate adder)					0	0			1	O						1	0	1		1	2	1	<u></u>	0					1			1				9	8
CI replacment when encroched by outside construction activities															1			1		1		2			П											5	4
Risk-based plan for pipe replacement																		1		1		1														3	3
Cast Iron sampling rqmt with replace criteria											1																									1	1
Service Replacement resulting from low pressure, flow restrictions, freezing									1																											1	1
Replacement program for Sour Gas Segments and Remedial Measures															3																П		П			3	1
Fitting Replacement Program or requirements																														3						3	1
Mandated Accelerated main replacement resulting from inadequate system pressure levels or											4					4									П												
other customer complaints										1	1					1		4																\rightarrow		2	2
Plastic replacement program - response to issues								H	+	-	1					1		ı	+						+			_					+	+	+	4	4
Entire CI/bare steel replacement completed for one or more operators						4			1		1					1		1														1	\perp	0	_	5	5
State regulation requires replacing CI and limits new installation of CI															1																			1		2	2
Replace mains that have been subject to flooding or obsolete regulators								Ш			\perp											Ш			\perp		1						\perp			1	1
Relocate/Replace Inside Meters to Outside Meters															1												1									2	2
Set Criteria for Encapsalation of Joint Leaks as Repair Method								Ш							1										Ш		1								\perp	2	2
Replacing customer-owned yard lines and private lines from master meters or customer service risers prone to leaks											1																									2	:
Authority Beyond OPS (not rate)																																	П			32	
Authority to order change in public interest, assessments, compliance with state statutes	1			2		1			1																											5	4
Modify State building code to prevent pipeline and sewer interference																																1				1	1
Encourage safety enhancement through rate cases				1							1		1							1																4	4
Red Tag/Reconnect Service Procedure required for customer appliances, NFPA 54 conformance required before gas provided				1		1		$\ \ ^{-}$			[1					1				1	1		ıΠ		1		1		$[\]^{\top}$			3		12	10
Sour Gas Scope and Authority						Ť									2										\Box								\dagger			2	1
All pipelines in State Waters (off shore) subject to regulations. Certain interstate operators subject to State Safety Regs								П						П					П				1		П					2			П	Т		3	
Gathering Line Rquirements for Type A, B, C, Gathering Lines not subject to 192 must report incidents, Gathering Lines are from first point of measurement				1											1															1						4	
Requires Assistance from non operators in disseminating public awareness plans and materials							1																		П											1	
Extending LDC Responsibility																																				22	
Public Awareness Plans must include messages to end use customers of customer responsibilities for downstream piping and appliances and reporting gas leaks, notifications to customers relocating within operators districts													1	1				2			1															5	
Jurisdiction extended beyond meter									1																						1					2	:
Extended LDC responsibility for service lines or master meter operations									1									1				1				1						1		1		8	
Operator required to respond to other operator emergencies if in same county							1																													1	
Maintenance responsibility for buried customer lines								П	1		1											1			П								П			3	
Operator owns service lines regardless of meter location																		1				1			1											3	3
*																		•							- 1					-						_ ~	

State Pipeline Safety Initiatives that	ALABAMA	ARIZONA	ARKANSAS CALIFORNIA	COLORADO	CONNECTICUT	TRICT OF COLUMBIA	DELAWARE	FLORIDA	GEORGIA IDAHO	NOIS	INDIANA	ν/	KANSAS	KENTUCKY	MAINE	MARYLAND	MASSACHUSETTS	MICHIGAN MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA NEBRASKA	NEVADA	NEW HAMPSHIRE	NEW JERSEY NEW MEXICO	NEW YORK	NORTH CAROLINA	eth DAKOTA O	OREGON	PENNSYLVANIA	PUEKTU KICU RHODE ISLAND	TH CAROLINA	SOUTH DAKOTA TENNESSEE	TEXAS	UTAH VERMONT	VIRGINIA	WASHINGTON	WEST VERGINIA WISCONSIN	UMING	Number of Intitiatives in Subcategory	Number of States with Intitiatives in Subcategory
Exceed Federal Code	ALA						DEL	FLO	GEO	3	IND	IOWA	KA	KEN	MAI	MA				MIS	MOI	NEV	NEV		NEV	NOF	NOF OHI	ORE			son	SOU	TEX	UTA	VIR				Sub	Nun Inti Sub
Number of State Initiatives	5	39	49 2	6 11	l 48	14	4	53	12 6	11	21	11	ŀ7 1	19 7	7 76	6 12	11	79 3	0 5	68	0 3	3	46	51 8	63	17	0 8	8 9	10	0 18	23	0 11	30	0 8	31	57	5 69 1		154	
External/Internal Corrosion	Ш																	_				Ш												\perp			$\bot\bot$		10	
Sour Gas Analysis and Monitoring Intervals	Н	4						_	_			_	_					2				Н						+						+				4	2	1
Pipe-Type & Bottle-Type Holders: Plan For Inspection and Testing			4	ļ.										1																				ıl					5	2
90 days to remediate								1						1	1																			П		1			3	3
Cathodic Protection	П						П															П				П								П					32	
Enhanced CP criteria, repair times		1						11					1							2					2								1	П	1		1		20	8
Corrosive environment presumed													1													П						1		П					2	2
Bare Steel Services must have Close Interval Survey													1																					П					1	1
Corrosive Gas defined, active corrosion deinition include deterioratin of pipe, periodic reports specified or defined	П																							4									2	П						
specified of defined																								-															3	
Requirements for Cathodic Protection near Power Transmission Lines																									1														1	1
Shorter Intervals for Cathodic Protection Testing									\perp				1							1				1				\perp					1	Ш					4	4
Readings req'd on all exposed pipe uncoated																																				1			1	1
Design/Install Requirements	П						П																											П				1	147	
Gas Compressor Stations Start Up/Shut Down Procedures and Maintenace Porcedures, gas compressor station fuel storage requirements, gas compressor station design requirements													:	2				1																			2		5	3
Restriction on Cast Iron Installations less than 4" diameter mains	П						1															П					\top				П			П					1	1
Purging Restrictions in confined space, purging procedure for sour gas																		1																			1		2	2
More restrictive joint requirements, copper joints require specific joining and material	П																					П												一						
requirments			4															1				Ш					\perp							\perp			2		7	3
Specified welding standards		1						2	_									6						1	3			4						Щ			1		14	6
Calibrated equipment required to inspect for coating damage prior to install, equipment accuracy requirements for pressure and flow													0											1		1								ıl					2	2
Only 0.32 design factor allowed for plastic (not 0.40)															1																			П					1	1
Above ground transmission pipeline is prohibited for class 2,3,4 locations, sour gas pipelines	П						П															П				П					П			П						
prohibited from Class 3 or 4 unless authorized													1					1								Ш								Ш					2	2
Installation requirements for plastic pipe, all plastic fittings must meet ASTM D2513 Category 1, ASTM D2513 1995 edition for temps greater than 100 Deg, fusion machines must be GPS and barcode capable		3	5					1																	1								1		1				12	6
Orifice Metering Constructed/Maintained per AGA GMC Rpt #3																													1					\vdash			$\perp \perp$		1	1
New pipe only steel and polyethylene, steel for any pressure >100 psi, bedding and backfill requirements, specifed material considerations for steel pipe		2			1															1																	4		8	4
40" or 48" depth of cover in agricultural areas, sour gas pipelines												1			١.			1							1									ш				\perp	3	3
Mains in public ROW must have 36 in cover, 30 in cover		4							4						1									1		Щ								\perp		4			2	2
Services in public ROW must have 30 in cover, all services must have 18 in cover															1									1										Ш					2	2
Interstate Pipelines including services must have > 24 in cover															1									1										+				+	2	2
Requires gas pipelines to cross over rather than under for interfering facilities, installation requirements for continous bedding and avoiding kinking and permanent bending, steel pipe installation restrictions to limit gouges															1								1	1													3		- 2	
All Regulators including service regulators must be vented outside, breather type vents on service regulators above flooding potential, vents require weather proof heads with cross sectional area specified			1												ľ																						2		3	2
Service Regulators cannot supply more than 2 psig to customers, service regulators to be inspected upon meter changeout, service regulators must be 3 ft from source ignition		1			2																																1		4	3
Service Regulators cannot be direct buried															1																								1	1
Specified separation from buried electric lines (12 inch, 8 inch), 48 inch separation for sour gas, 12" separation or other precautions for plastic (some states 6" separation)		1			1							1			1			1					1	1	2			1						П	1	1			12	11
Trans. Rqmts apply to all pipe >125 psi in class 3 or 4, all pipelines must meet Class 3 or 4 requirements, all transmission lines must be classified as Class 3 or 4 regardless of location, all sour gas pipelines designed to Class 4 (0.40 factor)												•					1	1						1	1														4	4
Mains with MAOP > 200 psig or 125 psig or 250 psig) must meet enhanced design, construction and maintenance requirements	П																1						2	1							П					1			5	4
Inlet AND outlet valves at distribution regulator stations or specified distances from the station, vault design requirements					1			1							2	2	1			1			_	-	1											1	1		7	6

State Pipeline Safety Initiatives that	IA	A	AKKANSAS CALIFORNIA	DO	CONNECTICUT	DISTRICT OF COLUMBIA	A A	A					ЖУ	.NA	IND	MASSACHUSETTS	AN OTA	IPPI	RI	NA KA		NEW HAMPSHIRE NEW IERSEY	NEW MEXICO	RK	NORTH DAKOTA	ОНІО ОКІАНОМА	OR EGON PENNSYLVANIA	PUERTO RICO	RHODE ISLAND	CAROLINA DAKOTA	TENNESSEE		L1	A	WASHINGTON WEST VED CIVIA	SIN	NG	Number of Intitiatives in Subcategory	Number of States with Intitiatives in Subcategory
	ALABAMA	ARIZONA	ARKANSAS CALIFORNI	COLORADO	NEC	TRIC	FLORIDA	ORGI	IDAHO	INDIANA	ΝA	KANSAS	KENTUCKY	LOUISIANA	MARYLAND	SSAC	MICHIGAN	MISSISSIPPI	MISSOURI	MONTANA NEBRASKA	NEVADA	NEW HAMPS NEW IERSEY	N ME	NEW YORK	RTH	IO LAHC	EGON	BRTO	ODE	Ĕ	NNES	TEXAS	UTAH VERMONT	VIRGINIA	SHIN	WISCONSIN	WYOMING	mber cate	mber itiati icate
Exceed Federal Code	AL/					DIS	FLC	GE	A E	I	IOWA	Σ	KE	ΓO Σ					MIS	ME				NE OF	N _O	OH OK			E.	SOI	TE	TE	VEI UT	VIR	WA	ă ă		Sub	Sub Sub
Number of State Initiatives Adequate over pressure protection required at town border stations and district regulating	5 3	39 4	9 20	6 11	48	14 4	1 53	12	6 1	1 21	11	47	19	7 7	6 12	11	79 30	0 5	68	0 3	3 4	46 51	1 8	63 1	7 0	8 8	9 10	0 0	18 2	23 0	11	30	0 8	31	57 5	69	12	1154	
stations including if pre 1971 installation, District Reg Station Fencing Requirements, Vault Requirements																	2		1						Ш													3	2
More Specific Farm Tap Requirments													1																									1	1
Device must be installed for monitoring and indicating failure of operating regulator within Over Pressure Protection System Directional Drilling requirements, construction requirements to avoid gas/air explosive																			1																	1		2	2
mixture																	1																	1		1		3	3
Identification of facilities required: multiservice installations, meters, district regulator stations, above ground installations							2																															2	1
Telemetry required at regulator stations serving specified quantity of customers																																		1		1		2	2
Casings prohibited on metal pipelines, casing requirements preventing shearing, GI-91/0285 Guidelines for Pipelines Crossing Rails and Highways when no casing is used							1																													3		4	2
Does not allow gas lines, haz liq lines under buildings, no concealed copper services and fitting restictions on copper services		1					1																													2		4	3
Location restrictions for higher-pressure systems, pipelines must consider overhead electric transmission influence, easements of has liquid pipeline must be clear of all encroached structures			1																					1											1	1		4	4
Expanded Incorporation By Reference for Acceptable Engineering Standards: NFPA54, NBS Method of Gas Testing, NBS Testing Lg Cap Rot Meters, AGA No.3 Orifice Metering, WV Short Course on Practical Methods, National Association of Corrosion Engineers International Standard NACE MR0175/ISO 15156, 2004-2007																	1							1						1								3	3
No buried galvanized or aluminum pipe		1															1																					2	2
Service Lines install by external contractors must be certified to meet State Requirments			1																																			1	1
Written Emergency Plan must have provisions for installation and blasting that include PPE for workers and knowledge of state damage prev laws	r							1																														1	1
Specific Design Requirements for Pipe Type Holders and Bottle Holders Specifies restoration of agricultural land after installation occurs, protective coating of steel services when boring through rocky soils			7	,		+					1																									1		7	1
New Master Meter Operator System must be reviewed/certified by LDC		•	1																																			1	1
Risk-based approaches																												Ш										11	
Inline inspections required to reveal cross bore of sewer laterals	Ш																1																	1				2	2
Base line and trending of cast iron and bares steel, non hazardous leaks																							Ш					Ш						2				2	1
Operators required to perform integrity assessments of entire line section, temporary and permanent repairs based on inspections to reveal defects, gouges, dents or leaks, requires operator determination of plant replacement based on operator inspections																								1								2				1		4	3
Annual eval of bare/cast	Ш				1							1									Ш	1	Ш					Ш										3	3
Enhanced Record Keeping	Щ												4			Ш					Ш		Ш		\Box			Ш										86	
OQ must cross reference with O&M and Emergency Plan														1	1													Ш										1	1
Maintain Records of Abandon Mains or facilities after a given date	Н				1				4				4	1	l	Н					\Box	1	\blacksquare		\perp			\blacksquare										3	3
More stringent data elements such as Test Pressures, Duration of Strength Test, Date, Description of Facilities, retention of pressure charts, testing services in equivalent manner as mains with associated records												1					1		1			1								1					1		1	8	8
Regulator & Relief Valve Calcs required of all OPP devices												1												1														2	2
All Records must be kept InState or accessible instate	П						1															1	П	1						1	1							5	5
Odorometer Records must be kept for specified duration, odorant records include sampling and odorant quantities used												1		1	1		1																		1			4	4
Leak Survey Records or Leak Investigation Records required for longer than 5 years,	Ш					1 '	1 1					1		1	1	Ш			1			1	+					\perp						Ш	1			8	8
Lifetime Records requirement for all Public Outreach	Ш												4			Ш						1	\square					\Box										1	1
Lifetime Records requirement for Corrosion Control of all Pipelines		2	2											1	1										Ш										1			4	3
Lifetime Records requirement for Strength Testing of all Pipelines							1					1		1	1							1		1											1			6	6
Lifetime Records requirement for Welding of all Pipelines, Welding Records must be at job site	\prod					Γ	1						T				1				T		\prod		1			\prod				$ \ \ $		Π				2	
All Key Valves or Critical Valves must be identified on Records/Maps			1				1																	2														4	3
Enhanced Corrosion Records such as documentation of corrosion areas, active corrosion, schedules of placement of cathodic protection devices, maps and records of cathodic protection devices			1									1							1													3						6	4

						1BIA																																		es in	th
State Pipeline Safety Initiatives that Exceed Federal Code	ALABAMA	ARIZONA	ARKANSAS	ALIFORNIA	COLORADO	ISTRICT OF COLUM	DELAWARE	FLORIDA	GEORGIA	AHO LINOIS	IDIANA	IOWA	KANSAS	KENTUCKY	DUISIANA	MAINE MARYLAND	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	ONTANA	NEBRASKA	NEVADA NEW HAMPSHIRE	NEW JERSEY	NEW MEXICO NEW YORK	ORTH CAROLINA	NORTH DAKOTA OHIO	KLAHOMA	OREGON PENNSYLVANIA	UERTO RICO	RHODE ISLAND SOUTH CAROLINA	SOUTH DAKOTA	TENNESSEE	UTAH	ERMONT	VIRGINIA WASHINGTON	WEST VERGINIA	WISCONSIN	WYOMING	Number of Intitiativ Subcategory	Number of States with Intitiatives in
Number of State Initiatives	4		49 2) ز 1 6			4	53	12	6 11	<u>≅</u>	11	≚ 47	≚ 19	7 7	≥ ≥ 76 12			≥ 3 30 !	5 6	2 ≥ 8 0	3				2 3 17	08	8	9 10	0 1	≃ ऽ 18 23	ا ت 1 0 1	1 30	0 0	8 3	> > 1 5		69 1	> 12	1154	ZE
Enhanced Meter Record Details Required (Capacity, Purchase Date, Type, Location, Pressure Rating, Accuracy Etc.)	J	3,	1) 2			0 11		55	'	0 13			.,	1	<u> </u>	1		,,	30 .	9 0			J 10	31	0.	J 17			7 10	0 3	2	, 0 3				1 37		0)	1	5	
Maintain Calibration Records and Identification of Equipment for specified duration																								1												1			1	3	
Leak Progression Maps must be updated and maintained																1																								1	
Investigate and Maintain Records of all Leaks as Failures, detailed leak reporting including cause, Records shall be kept as to leak complaints and remediation of leaks								1					1					1																				1		4	
O&M must include updates based on past violations, thorough and complete records review requirements																																			:	2				2	
GPS Coordinates required to be taken on exposed main, tees, valves, etc																1																		П			\Box			1	
Detailed Mapping Requirements			4					1			1									1						1			1		1 1				1		\Box		1	16	1
Inactive Services																																		П			\Box			15	
Requirement to cut inactive services off at main during demolition																1									1															2	
Deadline requirement to cut inactive services off at main or meters after specified time period		1				1		1								1	2						1						1		1 1				1	1		1		13	1
State Inspection Programs																																								52	
Ability to Use Outside Consultants for State led inspections when necessary, State to maintain GIS database of haz liquid pipeline operators and historical activities			•	1	1														1																					3	
Inspections focused by risk											1								1							1		•	1				1			1				5	
More frequent inspections/ contact/detailed audits	1	1	1 1	1 '	1 1	1	1	1	1	1	1	1	1	1		1 1	1	1	1 '	1 1	1	1	1 1	1	1 1	1		1 1	1 1		1 1		1 1		1	1 1	1	1	1	44	4
																																								1154	
Number of State Initiatives	5	39	49 2	6 1	1 4	8 14	4	53	12	6 11	21	11	47	19	7 7	76 12	2 11	79	30 !	5 6	8 0	3	3 46	51	8 6	3 17	0 8	8	9 10	0 1	18 23	0 1	1 30	0 0	8 3	1 57	7 5	69	12	1154	
Status Uncertain - please contact each State Individually for determination																																				-	\dagger				