Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno. In Response to Data Request, R15-01-008 - 2018 June Report

Appendix 1 - Rev. 03/31/18

Foreign Emissions included in the Report are based on miles of transmission pipeline. Therefore provide the miles of transmission pipeline in your system here. The following data on transmission pipeline leaks is for information purposes and will not be used to report transmission pipeline leak emissions this year. Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-a-value. At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.

Transmission

Pipeline Leaks:

12/31/2017 1/1/2017

ID	Geographic Location	Pipe Material	Pipe Size (nominal)	Pipe Age (months)	Pressure (psi)	Leak Grade	Above Ground or Below Ground	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Scheduled Repair Date (MM/DD/YY)	Reason for Not Scheduling a Repair	Number of Days Leaking	Emission Factor (Mscf/Mile/Year)	Annual Emissions (Mscf)	S Explanatory Notes / Comments	Prior Survey Date (MM/DD/YY)	Number of Days Leaking (use Prior Survey Date approach)
Transmission	SoCalGas Territory	PB	All	All	All	All	All	N/A	N/A	N/A	N/A	N/A	0.38	0.3	1 Mile - For 2017, the INGAA Greenhouse Gas Emission Estimation Guidelines for Natural Gas Transmission and Storage - Volume 18 1 GHG Emission Estimation Methodologies and Procedures (September 28, 2005 - Revision 2) - Table 4-4 study provides the best available estimate of emissions for Transmission Pipeline, which includes emissions from Flanges and Valves.	N/A	N/A
Transmission	SoCalGas Territory	PC	All	All	All	All	All	N/A	N/A	N/A	N/A	N/A	0.38	1,29	3,447 Miles - For 2017, the INGAA Greenhouse Gas Emission Estimation Guidelines for Natural Gas Transmission and Storage - 4 Volume 1 GHG Emission Estimation Methodologies and Procedures (September 28, 2005 - Revision 2) - Table 4-4 study provides the best available estimate of emissions for Transmission Pipeline, which includes emissions from Flanges and Valves.	N/A	N/A
6430649	93204	PC	26"	1,032	400	Code 1	В	3/23/2017	10/26/2017	N/A	N/A	299	N/A	N/	A Emissions accounted for by mileage-based INGAA Emission Factor	11/2/2016	299
6504830	93249	PC	26"	1,032	400	Code 2	В	8/17/2017	11/22/2017	N/A	N/A	326	N/A	N/	A Emissions accounted for by mileage-based INGAA Emission Factor	11/2/2016	326
6528506	92407	PC	36"	588	733	Code 2	В	9/13/2017		3/13/2018	N/A	365	N/A	N/	A Emissions accounted for by mileage-based INGAA Emission Factor	3/20/2017	287
6528507	92407	PC	36"	588	823	AN	A	9/12/2017		3/12/2018	N/A	365	N/A	N/	A Emissions accounted for by mileage-based INGAA Emission Factor	3/20/2017	287
6528420	92365	PC	36"	684	844	Code 2	В	9/12/2017	9/22/2017	N/A	N/A	265	N/A	N/	A Emissions accounted for by mileage-based INGAA Emission Factor	3/20/2017	187
6535262	92365	PC	30"	720	936	Code 2	В	9/30/2017	10/1/2017	N/A	N/A	1	N/A	29,50	10 Unusual large leak. The associated blowdown for repair is reported in the Blowdowns tab.	N/A	1

Sum Total

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

In Response to Data Request, R15-01-008 - 2018 June Report

Appendix 1 - Rev. 03/31/18

Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value. At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

Transmission Pipeline Damage (3rd party dig-ins, natural disasters, etc.):

ID	Geographic Location	Damage Type	Pipe Material	Pipe Size (nominal)	Pipe Age (months)	Pressure (psi)	Leak Grade	Above Ground or Below Ground	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/Day)	Annual Emissions (Mscf)	Explanatory Notes / Comments
6480580	93249	E	PC	26"	1044	400	Code 1	В	7/8/2017	7/9/2017	2	N/A	2,000	
												Cum Total	2 000	

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

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Notes:

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Transmission Pipeline Blowdowns:

ID	Geographic Location	Number of	Annual Emissions (Mscf)	Explanatory Notes / Comments
N/A	90047	Blowdown Events 1	138.90	Tie-In project
N/A	90047	1	12.68	Pipe section replacement
				·
N/A	90095	1 1	1,041.50	Tie-In project
N/A	90240		3,326.69	Valve replacement/installation
N/A	90245	2	1,630.00	Abandoment/Isolation of pipeline
N/A	90245	1	771.48	Valve replacement/installation
N/A	90250	1	1,416.00	Valve replacement/installation
N/A	90304	1	461.00	Abandoment/Isolation of pipeline
N/A	90640	1	483.00	Pipe section replacement
N/A	90671	1	1,842.00	Abandoment/Isolation of pipeline
N/A	90810	2	66.02	Pigging Operation Launcher/Receiver Emissions
N/A	91322	1	168.59	Abandoment/Isolation of pipeline
N/A	91343	1	7,185.30	Isolation of pipeline
N/A	91367	1	407.70	Tie-In project
N/A	91367	1	330.20	Tie-In project
N/A	91413	1	379.10	Tie-In project
N/A	91416	1	18.62	Pipe section replacement
N/A	91709	2	10,215.00	Valve replacement/installation
N/A	92201	1	827.90	Hydrotest
N/A	92201	1	1,490.20	Hydrotest
N/A	92201	1	881.18	Pipeline blowdown
N/A	92227	1	864.13	Pipe section replacement
N/A	92227	1	530.60	Tie-In project
N/A	92236	1	1,476.90	Hydrotest
N/A	92236	1	1,698.26	Pipe section replacement
N/A	92236	1	1,119.10	Pipeline blowdown
N/A	92239	2	1,811.50	Isolation of pipeline
N/A	92338	1	20,598.09	Pipeline blowdown
N/A	92356	1	30,244.00	Pipeline blowdown
N/A	92356	1	10,612.00	Pipeline blowdown
N/A	92365	1	30,659.00	Associated Blowdown emissions for repair the Unsual Large Leak reported under Line #20 in the Pipeline Leaks tab
N/A	92365	1	18,418.00	Pipeline blowdown
N/A	92365	4	14,226.28	Remediation work
N/A	92365	3	969.00	Tie-In project
N/A	92392	1	10,089.00	Tie-In project
N/A	92407	1	2.31	Pigging Operation Launcher/Receiver Emissions
N/A	92555	1	5,694.82	Pipeline blowdown
N/A	93001	2	258.21	Pigging Operation Launcher/Receiver Emissions
N/A	93002	1	1,021.00	Pipeline blowdown
N/A	93023	1	3.38	Pigging Operation Launcher/Receiver Emissions
N/A	93117	1	144.00	Tie-In project
N/A	93249	1	31.91	Pipeline blowdown
N/A	93249	8	2,198.55	Pipeline blowdown
N/A	93252	1	344.59	Pipeline blowdown
N/A	93252	1	92.86	Pipeline blowdown
N/A	93252	1	5,799.00	Valve replacement/installation
N/A	92201/92262	2	193.83	Pigging Operation Launcher/Receiver Emissions
N/A	92239/92236	3	2,897.37	Pipeline blowdown
N/A	92262/92555	2	156.10	Pigging Operation Launcher/Receiver Emissions

ID	Geographic Location	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
N/A	92301/92336	2	170.17	Pigging Operation Launcher/Receiver Emissions
N/A	92701/92626	2	173.68	Pigging Operation Launcher/Receiver Emissions
N/A	93013/93001	2	166.48	Pigging Operation Launcher/Receiver Emissions
N/A	93230/93245	2	42.97	Pigging Operation Launcher/Receiver Emissions
N/A	93516/92301	2	144.31	Pigging Operation Launcher/Receiver Emissions
N/A	SoCalGas Territory	167	5.01	Filter Change-outs or Filter Inspections w/parts replacement - Estimated avg. gas vented = 30 scf/ea
N/A	SoCalGas Territory	76	63.33	Pipeline Drip Accumulation - Estimated avg. gas vented = 10,000 cfh for 5min/device
N/A	SoCalGas Territory	291	0.58	Pneumatic Device Annual Inspections - Estimated avg. gas vented = 2 scf/insp
N/A	SoCalGas Territory	64	1.28	Relief Valve Inspections at Transmission Pipeline - Estimated avg. gas vented = 20 scf/insp (annual test with Nitrogen, gas vented is volume of gas in valve)
N/A	SoCalGas Territory	961	2.49	Transmission Odor Intensity Tests

Sum Total

196,017.15

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

In Response to Data Request, R15-01-008 2018 June Report Appendix 1; Rev. 03/31/17

Notes:

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At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

The emissions captured on this tab represent the emissions associated with the operational design and function of the component. Any intential release of natural gas for safety or maintenance purposes should be included in the Blowdowns worksheet.

Transmission Pipeline Component Vented Emissions:

Total Number of Devices	Device Type	Bleed Rate	Manufacturer	Emission Factor (Mscf/day/ <mark>dev</mark>)	Annual Emission (Mscf)	Explanatory Notes / Comments
282	Р	I	Mics.	0.0576	5,929	
9	Р	Н	Fisher/Bristol	0.4457	1,464	
				Sum Total	7,393	

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

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Appendix 1; Rev. 03/31/17

Notes:

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At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

The emissions captured on this tab represent the emissions associated unintentional leaks that if repaired would not leaking. If the component is releasing gas or "bleeding" as a result of its design or function then it is not to be captured in this tab.

ansmissio	n Pipeline Cor	mponen	t Fugiti	ve Leaks:						12/31/2017	1/1/2017
ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days	Emission Factor	Annual Emission	Explanatory Notes / Comments	Prior Survey Date
	Location	Type	Nate		(IVIIVI) DD) TT)	(IVIIVI/DD/TT)	Leaking	(Mscf/day)	(Mscf)		(MM/DD/YY)
5101178	91321	0	N/A	N/A	5/8/2012	10/13/2017	286	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/20/2012
5114525	93510	0	N/A	N/A	10/22/2012	12/20/2017	354	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/29/2012
6463966	92282	0	N/A	N/A	2/25/2014	11/10/2017	314	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/30/2013
6238338	92604	0	N/A	N/A	2/5/2016	9/20/2017	263	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/11/2015
6063797	93252	0	N/A	N/A	2/19/2016		365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	12/3/2015
6329636	93552	0	N/A	N/A	3/23/2016	12/8/2017	342	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	10/16/201
6238196	92886	0	N/A	N/A	8/5/2016	4/9/2017	99	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	12/5/2015
2059773	92887	0	N/A	N/A	8/5/2016	4/9/2017	99	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	12/5/2015
5238198	92886	0	N/A	N/A	8/5/2016	4/14/2017	104	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	6/27/2016
6206806	92886	0	N/A	N/A	8/6/2016	9/28/2017	271	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	2/13/2016
6412373	91380	0	N/A	N/A	9/14/2016	9/19/2017	262	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/21/2016
6247110	9311	0	N/A	N/A	9/28/2016	8/28/2017	240	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	6/16/2016
6347629	90245	0	N/A	N/A	9/28/2016	3/4/2017	63	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/25/2016
6285987	90245	0	N/A	N/A	11/23/2016	5/18/2017	138	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/25/2016
6290044	92677/92691	0	N/A	N/A	12/2/2016	6/23/2017	174	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	2/16/2016
6287336	93001	0	N/A	N/A	12/2/2016	9/28/2017	271	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/15/2016
6329729	93252	0	N/A	N/A	12/9/2016	9/22/2017	265	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	7/25/2016
6329728	93252	0	N/A	N/A	12/9/2016	2/14/2017	45	N/A	N/A	Thread/Coupling component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	6/27/2016
6329719	93251	0	N/A	N/A	12/10/2016	12/20/2017	354	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/2/2016
6329726	93521	0	N/A	N/A	12/10/2016	12/28/2017	362	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	10/31/201
6329725	93204	0	N/A	N/A	12/13/2016	10/17/2017	290	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/2/2016
5329723	93204	0	N/A	N/A	12/13/2016	12/8/2017	342	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/2/2016
	93249	P					205				
5363128	93249	0	N/A	N/A	12/13/2016	7/24/2017		N/A	N/A	Actuator component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/2/2016
329727			N/A	N/A	12/15/2016	11/14/2017	318	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/2/2016
6329722	93249	0	N/A	N/A	12/15/2016	11/21/2017	325	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/2/2016
6329721	93249	0	N/A	N/A	12/15/2016	12/15/2017	349	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/2/2016
6437601	90245	0	N/A	N/A	12/15/2016	5/26/2017	146	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	10/4/2016
6329720	93521	0	N/A	N/A	12/19/2016	0/05/0047	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	12/2/2016
6329730	93252	0	N/A	N/A	12/28/2016	9/26/2017	269	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	7/25/2016
6329732	93311	0	N/A	N/A	12/28/2016	3/8/2017	67	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	12/21/2016
6463964	92552	0	N/A	N/A	1/3/2017	10/17/2017	290	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/5/2016
6480606	92870	0	N/A	N/A	1/27/2017	10/11/2017	284	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	7/9/2016
6363243	91752	0	N/A	N/A	1/30/2017	2/8/2017	39	N/A	N/A	Unibolt component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	12/29/2016
6347851	91344	0	N/A	N/A	2/3/2017	5/18/2017	138	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/13/2016
6363651	91205	0	N/A	N/A	2/8/2017	9/22/2017	265	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/12/2016
6364975	92870	0	N/A	N/A	2/17/2017	12/29/2017	363	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/7/2016
6370365	93015	Р	N/A	N/A	2/28/2017	3/1/2017	60	N/A	N/A	Actuator component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/22/2016
6386339	92356	0	N/A	N/A	3/7/2017	3/7/2017	66	N/A	N/A	Gasket component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	12/28/201
6386188	91386	0	N/A	N/A	3/7/2017	3/29/2017	88	N/A	N/A	Fitting component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/21/2016
6387536	92377	0	N/A	N/A	3/9/2017	4/11/2017	101	N/A	N/A	Fitting component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/16/2016
6392021	91384	0	N/A	N/A	3/10/2017	8/10/2017	222	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/1/2016
6386476	91384	Р	N/A	N/A	3/10/2017	3/10/2017	69	N/A	N/A	Actuator component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/22/2016
6430698	93256	0	N/A	N/A	3/16/2017		343	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	1/23/2017
5430702	93252	0	N/A	N/A	3/20/2017	9/22/2017	261	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	1/5/2017
5430697	93311	0	N/A	N/A	3/21/2017	8/31/2017	243	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/7/2016
5395413	93263	0	N/A	N/A	3/24/2017		343	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	1/23/2017
6395443	93311	0	N/A	N/A	3/29/2017		282	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/25/2017
5417226	91763	0	N/A	N/A	5/2/2017		365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	12/29/201
6396777	92628	Ō	N/A	N/A	5/19/2017	2/20/2018	312	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	2/23/201
5436299	90713	O	N/A	N/A	5/25/2017	, .,	342	N/A	N/A	Fitting component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	1/24/201
6453852	91506	0	N/A	N/A	5/27/2017	5/28/2017	20	N/A	N/A	Fitting component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	5/9/2017
6453858	91356	0	N/A	N/A	6/5/2017	5,25,201,	271	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	4/5/2017
6455797	92555	0	N/A	N/A	6/16/2017		300	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/7/2017
5.55151	92023	0	N/A	N/A	7/25/2017		284	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/23/2017

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day)	Annual Emission (Mscf)	Explanatory Notes / Comments	Prior Survey Date (MM/DD/YY)
6514227	91344	0	N/A	N/A	9/8/2017	9/8/2017	178	N/A	N/A	Fitting component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/15/2017
6528508	92392	0	N/A	N/A	9/12/2017	9/14/2017	190	N/A	N/A	Fitting component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/9/2017
6528403	91384	0	N/A	N/A	9/13/2017		283	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/24/2017
6534240	92058	0	N/A	N/A	9/26/2017		100	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/23/2017
6535030	92899	0	N/A	N/A	10/2/2017		126	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/28/2017
6489519	92868	0	N/A	N/A	10/6/2017	10/17/2017	30	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/18/2017
6567229	92551	0	N/A	N/A	10/8/2017	10/8/2017	164	N/A	N/A	Fitting component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	4/28/2017
6620189	93251	0	N/A	N/A	10/19/2017		103	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/20/2017
6620188	93383	0	N/A	N/A	10/20/2017		103	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/20/2017
6620190	93311	0	N/A	N/A	10/20/2017		104	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/19/2017
6554607	93311	0	N/A	N/A	10/30/2017		104	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/19/2017
6567861	90066	0	N/A	N/A	11/10/2017	11/10/2017	53	N/A	N/A	Gasket component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/19/2017
6550210	91382	0	N/A	N/A	11/28/2017	11/28/2017	63	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/27/2017
6601116	92690	0	N/A	N/A	12/29/2017		129	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/25/2017

Sum Total 0

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate In Response to Data Request, R15-01-008 2018 June Report

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Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value. At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

Transmission Pipeline Odorizers:

ID	Geographic Location	Number of Units	Emission Factor (Mscf/yr)	Annual Emission (Mscf)	Explanatory Notes / Comments
Gas Quality Equipment	SoCalGas Territory	30	N/A	54.38	Transmission (BTU, Gas Quality), Gas Chromatographs (GC). Use manufacturing specs. See Notes in Appendix 9.
Gas Quality Equipment	SoCalGas Territory	20	N/A	362.81	Located in Storage, GCs and Gas Analyzers. Use manufacturing specs. See Notes in Appendix 9.
Gas Quality Equipment	SoCalGas Territory	15	N/A	251.75	Transmission (Interstate, Interutilities), GCs and Gas Analyzers. Use manufacturing specs. See Notes in Appendix 9.
Gas Quality Equipment	SoCalGas Territory	82	N/A	712.68	Transmission (Producers), Gas Analyzers. Use manufacturing specs. See Notes in Appendix 9.
Gas Quality Equipment	SoCalGas Territory	43	N/A	16.65	Transmission (Producers), Gas Sample/Quality Tests. Use manufacturing specs. See Notes in Appendix 9.
Odorizer	SoCalGas Territory	52	N/A	947.70	YZ Odorizer. Use manufacturing specs. See Notes in Appendix 9.
			Sum Total	2,345.96	

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н	Header column "Comment" boxes displayed below for reference.							
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)							
Tab: Pipeline Leaks								
ID								
Geographic Location	GIS, zip code, or equivalent							
	PB = cathodically protected steel, bare							
Pipe	PC = cathodically protected steel, coated							
Material	UB = unprotected steel, bare							
	UC = unprotected steel, coated							
Pipe Size								
(nominal)								
Pipe Age								
(months)								
Pressure (psi)	MOP = maximum operating pressure over the past year							
	1 = grade 1							
	2 = grade 2							
	2+ = grade 2+							
Leak	3 = grade 3							
Grade	AH = Above Ground Hazardous synonoumous with Grade 1.							
	AN = Above Ground Non-Hazardous							
	AM = Above Ground Non-Hazardous Minor (akin to grade 3 below ground leak).							
	N = non-graded or ungraded							
Above Ground or Below	A = above ground							
Ground	B = below ground							
Discovery Date								
(MM/DD/YY)								
Repair Date	Date that the pipeline repair stopped the leak. Any associated blowdowns resulting							
(MM/DD/YY)	from the repair should be included in the blowdowns tab.							
Scheduled	If leak is open, specify the scheduled date of repair, or type "M," signifying that the leak							
Repair Date	is being monitored with no scheduled date of repair.							
(MM/DD/YY)	Then, provide the reason for not scheduling a repair in Column for that purpose.							
Reason for Not Scheduling	If not scheduled for repair (e.g. with a "M" for monitoring the leak in Scheduled Repair							
a Repair	Date), then provide the reason for not scheduling a repair.							

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ŀ	leader column "Comment" boxes displayed below for reference.
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)
Number of Days Leaking	If the leak was discovered by survey in the year of interest, then assume leaking from January 1st of subject year thru repair date or December 31st of subject year, which ever is earlier. (E.G. Days Leaking = Repair - Jan 1st + 1 day.) (For days leaking for leaks carried over use January 1st as start date for emissions calculations.) For O&M discovered leaks, assume that the leak begins with the discovery date thru
	repair date or December 31st of subject year, whichever is earlier.
Emission Factor (Mscf/Day)	
Annual Emissions	
(Mscf)	
Explanatory Notes / Comments	
Tab: All Damages	
ID	
Geographic Location	GIS, zip code, or equivalent
Damaga	E = excavation damage
Damage Type	N = natural force damage
.,,,,,	O = other outside force damage
	PB = cathodically protected steel, bare
Pipe	PC = cathodically protected steel, coated
Material	UB = unprotected steel, bare
	UC = unptotected steel, coated
Pipe Size (nominal)	
Pipe Age	
(months)	
Pressure (psi)	MOP = maximum operating pressure over the past year

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н	eader column "Comment" boxes displayed below for reference.
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)
Leak Grade	1 = grade 1 2 = grade 2 2+ = grade 2+ 3 = grade 3 N = non-graded or ungraded
Above Ground or Below Ground	AH = above ground, hazardous AN = above ground, non-hazardous B = below ground
Discovery Date	
(MM/DD/YY) Repair Date	
(MM/DD/YY)	
Number of Days Leaking	If date and time stamp are reliable and used consistently by respondent, then emissions may be calculated based on actual time leaking. E.G. Repair time - damage event time = duration of event. If respondent has average or historical leak duration based on the nature and circumstances of damages, then these may be applied to like damage events. The emissions factors should be adequately supported and explained in the filing. If actual time stamps and historical averages are not available, then whole days should be used in the engineering calculation. The leak begins with the damage event date thru repair date or December 31st of subject year, whichever is later. E.G. Days Leaking = Repair date - date of damage + 1 day.
Emission Factor	. ,
(Mscf/Day)	
Annual Emissions (Mscf)	
Explanatory Notes /	Provide method of calculation and example of formula.
Comments	Explain how any EF's used were derived.

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н	Header column "Comment" boxes displayed below for reference.							
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)							
Tab: Blowdowns								
ID								
Geographic Location	GIS, zip code, or equivalent							
Number of Blowdown								
Events								
Annual Emissions (Mscf)								
Explanatory Notes /	Provide method of calculation and example of formula.							
Comments	<u>'</u>							
Tab: Companent Vant	od Emissions							
Tab: Component Ventor Geographic Location	GIS, zip code, or equivalent							
Geographic Location	C = connector							
	O = open-ended line							
Device Type	M = meter							
	P = pneumatic device							
	PR = pressure relief valve							
	V = valve							
	L = low bleed							
Bleed Rate	I = intermittent bleed							
	H = high bleed							
	NA = not applicable							
Manufacturer								
	Because the emissions are a factor of design or function, these emissions counted for							
	the entire year.							
Annual Emissions (Mscf)	E.G. 365 days times the actual volume emitting if known, or the approved Emissions							
, ,	Factor.							
Explanatory Notes /	Note whether the emissions are based on actual volumetric measures.							
Comments	whether the emissions are based on actual volumetric measures.							
T.I. O								
Tab: Component Leaks								

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Header column "Comment" boxes displayed below for reference.		
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)	
ID		
Geographic Location	GIS, zip code, or equivalent	
Device Type	C = connector	
	O = open-ended line	
	M = meter	
	P = pneumatic device	
	PR = pressure relief valve	
	V = valve	
Bleed Rate	L = low bleed	
	I = intermittent bleed	
	H = high bleed	
	NA = not applicable	
Manufacturer		
Discovery Date (MM/DD/YY)	List the actual discovery date.	
	If the leak was discovered in the year of interest, then we will assume the component was leaking from the beginning of the year for emissions reporting purposes, or prior survey date if surveyed previously within the year of interest.	
Repair Date (MM/DD/YY)	Date that the component repair stopped the leak. Any associated blowdowns as a result of the repair should be included in the blowdowns tab.	
Number of Days Leaking	Assume Leaking from January 1 of subject year or prior survey date, whichever is later, thru the repair date (if repaired in year of interest) or December 31 of subject year, whichever is earlier. For O&M discovered leaks, assume that the leak begins with the discovery date thru repair date or December 31st of subject year, whichever is earlier.	
Annual Emissions (Mscf)		
Explanatory Notes /		
Comments		
Tab: Odorizers		
ID		
Geographic		
Location	GIS, zip code, or equivalent	

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Header column "Comment" boxes displayed below for reference.	
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)
Number of Units	
Emission Factor	
(Mscf/yr)	
Annual Emission	All of the emissions from the odorizing process and equipment.
(Mscf)	
Explanatory Notes /	
Comments	