

## SoCalGas

### 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. and In Response to Data Request SoCalGas R15-01-008 2017 June Report

3/31/2017

#### Appendix 2

Rev. 3/31/17

Pursuant to SB 1371, Leno - Natural gas: leakage abatement, the California Public Utilities Commission (CPUC) requests that the following information be transmitted to the CPUC and the State Air Resources Board (ARB):

Note - Definitions in Data Request SoCalGas R15-01-008 2017 June Report

The following question in the above mentioned data request is answered using the spreadsheets in this Appendix (#2):

(6) Calculable or estimated fugative emissions and non-graded gas leaks, as defined in Data Request SoCalGas R15-01-008 2017 June Report

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.

Facilities emissions that are based on a population count times an emission factor (See Appendix 9 for guidance).

Response:

#### Transmission M&R Station Total Leaks and Emissions:

Number of Stations	Station Classification	Emission Factor (Mscf/yr/station)	Annual Emission (Mscf)	Explanatory Notes / Comments
9,245	F	12.2	112,789	
52	D	12.2	634	
112	T	1,554.8	174,138	
	Sum Total		287,561	

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Response:

**Transmission M&R Station Blowdowns:**

ID	Geographic Location	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
Tap Facility Insp.	SoCalGas Territory	1,085	1.09	External Regulator Inspections @ 1 scf/ea
Tap Facility Insp.	SoCalGas Territory	684	2.05	Reg. chg. out & Internal Reg Insp @ 3 scf/ea
Relief Valve Insp.	SoCalGas Territory	101	2.02	Annual test with Nitrogen. Only gas vented is volume of gas in valve @ 20 scf/insp.
Pressure Limiting Station Insp.	SoCalGas Territory	157	3.14	Annual Insp. Vented gas = 20 scf/insp.
Pneumatic Device Insp.	SoCalGas Territory	266	0.27	Biannual Insp. Pneumatic Devices with avg. gas vent = 1 scf/insp.
Trans Mtr Orifice Plate Insp.	SoCalGas Territory	2	0.05	Orifice Plate Insp. Avg. gas vented = 25 scf/insp.
Drip Operations	SoCalGas Territory	309	257.50	Pipeline Drip accumulation approx. emissions, bleed rate = 10,000 cfh for 5min per device
		<b>Sum Total</b>	<b>266.11</b>	

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(6) Calculable or estimated emissions and non-graded gas leaks, as defined in Data Request SoCalGas R15-01-008 2017 June Report

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

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

Response:

#### Transmission M&R Station Component Vented Emissions:

ID/Number of Devices	Geographic Location	Device Type	Bleed Rate	Manufacturer	Number of Days Emitting	Annual Emissions (Mscf)	Explanatory Notes / Comments	Emission Factor (Mscf/day/dev)
68	SoCalGas Territory	P	I	Mics.	366	NA	Intermittent Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year	0.0576
15	SoCalGas Territory	P	I	Mics.	366	316	Producers - Intermittent Bleed Pneumatic Devices. Use EF for Intermittent Bleed Pneumatics = 0.0576 Mscf/day/dev	0.0576
21	SoCalGas Territory	P	H	Fisher/Bristol	366	NA	High Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year	0.4457
29	SoCalGas Territory	P	H	Fisher/Bristol	366	4,731	Producers - High Bleed Pneumatic Devices. Use EF for High Bleed Pneumatics = 0.4457 Mscf/day/dev	0.4457
					Sum Total	5,047		

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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.

**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.**

Response:

**Transmission M&R Station Component Fugitive Leaks:**

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Annual Emissions (Mscf)	Explanatory Notes / Comments
6305928	92555	Other	NA	NA	12/13/2016	12/16/2016	351	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001248618	93224	V	NA	NA	2/17/2016	2/17/2016	48	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001248629	90031	C	NA	NA	2/2/2016	2/2/2016	33	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001272583	91776	C	NA	NA	3/1/2016	3/1/2016	61	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001273939	93245	C	NA	NA	3/10/2016	3/10/2016	70	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001297702	91764	Other	NA	NA	4/11/2016	4/11/2016	102	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001297754	92257	V	NA	NA	4/18/2016	4/18/2016	109	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001298409	91316	Other	NA	NA	4/21/2016	4/21/2016	112	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001298412	91406	Other	NA	NA	4/15/2016	4/15/2016	106	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001301675	93105	V	NA	NA	3/10/2016	3/10/2016	70	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Annual Emissions (Mscf)	Explanatory Notes / Comments
520001340261	90065	C	NA	NA	5/18/2016	5/18/2016	139	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001340263	91204	C	NA	NA	5/20/2016	5/20/2016	141	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001358236	92821	Other	NA	NA	7/19/2016	7/19/2016	201	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001375996	91764	Other	NA	NA	8/1/2016	8/1/2016	214	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001376571	93224	V	NA	NA	8/2/2016	8/2/2016	215	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001391735	92252	C	NA	NA	9/6/2016	9/6/2016	250	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001404038	92240	Other	NA	NA	8/25/2016	8/25/2016	238	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001410095	93013	Other	NA	NA	10/14/2016	10/14/2016	288	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001410903	93004	C	NA	NA	12/14/2016	12/14/2016	349	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001441251	91749	C	NA	NA	10/26/2016	10/26/2016	300	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001448805	91302	C	NA	NA	11/9/2016	11/9/2016	314	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
520001491459	92821	C	NA	NA	12/21/2016	12/21/2016	356	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year
10-148-93	91355	Other	NA	NA	1/5/2016	1/6/2016	6	NA	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year

Sum Total

0

Note: Selection for "Other" types of component leaks was removed as a selection category. Suggest adding this category back into the list of Device Type.