

PACIFIC GAS AND ELECTRIC COMPANY

Gas Operations Support Team

Data Response

QUESTION(S) 4806.03: On average, how many man-hours (including travel time and labor) do you currently spend to identify a leak? Please provide your calculations.

RESPONSE(S) 4806.03: PG&E identifies leaks as part of performing routine leak survey (sometimes no leaks are found), and the man-hours to identify leaks during the routine survey are not tracked separately within the time recorded for leak survey. The average man-hours (including travel time and labor) for all gas transmission pipeline miles surveyed in 2013 is based on recorded total man-hours and the total mileage surveyed. The calculation is included in the table below. Please note that the average man-hours are for performing routine leak survey and do not include customer reported leaks.

2013					
MAT	MAT Description	Unit Description	Units Completed	Recorded Man-Hours	Average Hrs/Unit
<i>Calculation: $b \div a = c$</i>			<i>a</i>	<i>b</i>	<i>c</i>
JOE	Routine Leak Survey	Miles of Pipe	6,563	12,521	1.91

QUESTION(S) 4806.04: On average, what does it currently cost (including travel time, labor and materials) to identify a leak? Please provide your calculations.

RESPONSE(S) 4806.04: PG&E identifies leaks as part of performing routine leak survey (sometimes no leaks are found), and the cost to identify leaks during the routine survey is not tracked separately within the total cost recorded for leak survey. The average costs (including travel time and labor) for all gas transmission pipeline miles surveyed in 2013 is based on 2013 recorded total costs and the total mileage surveyed. The calculation is included in the table below. Please note that the average cost is for performing leak survey and does not include customer reported leaks.

2013					
MAT	MAT Description	Unit Description	Units Completed	Recorded Costs	Average \$/Unit
<i>Calculation: $b \div a = c$</i>			<i>a</i>	<i>b</i>	<i>c</i>
JOE	Routine Leak Survey	Miles of Pipe	6,563	\$2,833,888	\$431.80

QUESTION(S) 4806.05: On average, how many man-hours (including travel time and labor) do you currently spend to fix a leak? Please provide your calculations.

RESPONSE(S) 4806.05: PG&E tracks leak repairs based on Maintenance Activity Types (MATs) listed in the table below. The average man-hours (including travel time and labor) to repair leaks is provided for each type of leak repair or replacement based on 2013 recorded units and total man-hours for each type. The calculation is included in the table.

2013					
MAT	MAT Description	Unit Description	Units Completed	Recorded Man-Hours	Average Hrs/Unit
<i>Calculation: $b \div a = c$</i>			<i>a</i>	<i>b</i>	<i>c</i>
75	Pipeline reliability	Capital Leak Repair	8	12,864	1,608
JO	GT Pipeline Maintenance	Expense Maintenance Leak Repair	196	4,098	21
JTB	GT Reliability and General Maintenance	Expense Project Leak Repair	12	3,323	277

QUESTION(S) 4806.06: On average, what does it currently cost (including travel time, labor and materials) to fix a leak? Please provide your calculations.

RESPONSE(S) 4806.06: PG&E tracks leak repairs based on MATs listed in the table below. The average cost to repair leaks (all associated costs in addition to labor) is provided for each type of leak repair or replacement based on 2013 recorded units and total costs for each type. The calculation is included in the table.

2013					
MAT	MAT Description	Unit Description	Units Completed	Recorded Costs	Average \$/Unit
<i>Calculation: $b \div a = c$</i>			<i>a</i>	<i>b</i>	<i>c</i>
75	Pipeline reliability	Capital Leak Repair	8	\$3,854,500	\$481,813
JO	GT Pipeline Maintenance	Expense Maintenance Leak Repair	196	\$812,438	\$4,145
JTB	GT Reliability and General Maintenance	Expense Project Leak Repair	12	\$869,645	\$72,470

QUESTION(S) 4806.08: On average, what does it cost (including travel time, labor and materials) to replace a service riser?

RESPONSE(S) 4806.06: There are no service risers on the gas transmission system.

QUESTION(S) 4806.09: On average, what does it cost (including travel time, labor and materials) to replace a service line and riser? Internally sleeving the service line with plastic pipe is also considered replacement.

RESPONSE(S) 4806.09: There are no service lines or risers on the gas transmission system.

QUESTION(S) 4806.10: On average, how many man-hours (including travel time and labor) do you currently spend to monitor Non-Hazardous leaks? Please provide your calculations.

RESPONSE(S) 4806.10: The average man-hours to monitor a Non-Hazardous leak (including travel time and labor) is based on 2013 recorded units and total man-hours. The calculation is included in the table.

2013					
MAT	MAT Description	Unit Description	Units Completed*	Recorded Man-Hours	Average Hrs/Unit
Calculation: $b \div a = c$			a	b	c
JOR	Rechecks	# of Rechecks Performed	150	155	1.03

* This number is based on open leak indications identified as associated with gas transmission pipelines and is subject to change.

QUESTION(S) 4806.11: On average, what does it currently cost (including travel time, labor and materials) to monitor a Non-Hazardous leak? Please provide your calculations.

RESPONSE(S) 4806.11: The average cost to monitor a Non-Hazardous leak (all associated costs in addition to labor) is based on 2013 recorded units and total costs. The calculation is included in the table.

MAT	MAT Description	Unit Description	Units Completed*	Recorded Costs	Average \$/Unit
Calculation: $b \div a = c$			a	b	c
JOR	Rechecks	# of Rechecks Performed	150	\$29,960	\$199.73

* This number is based on open leak indications identified as associated with gas transmission pipelines and is subject to change.

QUESTION(S) 4806.13: During the years 2011 to 2013 how many leaks did you repair (by year)?

RESPONSE(S) 4806.13: Please see response to Question 19.

QUESTION(S) 4806.16: How many Non-Hazardous leaks are you currently monitoring?

RESPONSE(S) 4806.16: The table below is based on a data query from PG&E's Integrated Gas Information System (IGIS) database for Non-Hazardous open leak indications currently identified as associated with gas transmission pipelines. PG&E cannot actually confirm that a leak indication is associated with a gas transmission pipeline until it is exposed and repaired; therefore, the total count in the table below likely overstates the number of open gas transmission leak indications PG&E is currently monitoring.

Open Non-Hazardous Leaks

Leak Grade*	Count
2+	16
2	25
3	109
Total	150

*Current as of week of 4/14/2014

QUESTION(S) 4806.19: During the years 2011 to 2013 how many leaks did you have in each of your class locations, including HCAs? Please use the attached spread sheet and format to record your answers.

RESPONSE(S) 4806.19: Please see attachment "*All Gas Transmission Leaks 2011-2013 R1.xlsx*" for a list of DOT reportable gas transmission pipeline leaks repaired between 2011 and 2013. This list excludes leaks repaired by simply tightening, lubricating or adjusting (unless they were hazardous) and open leak indications found near gas transmission lines because those leak indications cannot be confirmed as leaks on gas transmission pipelines until repaired.

QUESTION(S) 4806.20: During the years 2011 to 2013, including Dig-Ins, how many leaks did you upgrade and how many did you downgrade? Please use the attached spread sheet and format to record your answers.

RESPONSE(S) 4806.20: Please see attachment "*Gas Transmission Leak Upgrades and Downgrades 2011-2013 R1.xlsx*" for a list of upgrades and downgrades of DOT reportable gas transmission pipeline leaks repaired between 2011 and 2013. This list excludes leaks repaired by simply tightening, lubricating or adjusting (unless they were hazardous) and open leak indications found near gas transmission lines because those leak indications cannot be confirmed leaks on gas transmission pipelines until repaired. The template indicates to include Dig-Ins. Dig-Ins are repaired and not upgraded or downgraded; therefore, dig-ins are not included.