Pacific Gas and Electric Company

Brian K. Cherry
Vice President
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

415.973.4977
Fax: 415.973.7226

February 11, 2011

Paul Clanon, Executive Director
California Public Utilities Commission
505 Van Ness
San Francisco, CA 94102-3298

Re: Long Range Gas Transmission Pipeline Planning Input
Top 100 Segments – 2007-2009

Dear Mr. Clanon:

In a letter dated September 17, 2010, you directed PG&E to "provide a list of PG&E's top 100 list of high priority pipeline projects, by segment, from 2007 to the present, that PG&E has identified as priority candidates for replacement or upgrade for reasons of public safety, including the current version of such list."

On September 20, 2010, PG&E provided a partial response to this request, which included the current list, based on 2009 data. On September 24, 2010, PG&E provided an update to the 2009 Top 100 gas transmission projects, which reflected changes such as more precise location information. PG&E also made the updated 2009 Top 100 available on its website.

As indicated in PG&E's September 20, 2010 response, the Top 100 list was not a list of projects that PG&E had identified as "priority candidates for replacement or upgrade for reasons of public safety." PG&E has a comprehensive gas transmission system integrity management program, which includes an inspection and monitoring program to help ensure the safety of its natural gas transmission pipeline system. Any issues identified as a threat to public safety are immediately addressed.

As described below, the Top 100 lists have been a component of PG&E's risk management program. As part of our efforts to enhance operations, PG&E has begun developing our Pipeline 2020 program, which is focused on modernizing our pipeline infrastructure, spurring development of next-generation pipeline inspection technologies, enhancing public safety awareness and emergency response planning, and developing industry-leading best practices, including state-of-the-art risk assessment techniques. Going forward, PG&E will use these new risk management techniques to guide its future work.

PG&E's Top 100 was an engineering planning tool within PG&E's integrity management program. Its primary function was to highlight segments for further engineering investigation, monitoring, or other follow-up, not for immediate repair or replacement. The Top 100 list was developed based on a program that first inventoried PG&E's entire transmission system, then evaluated data on each of the approximately 20,000 pipeline segments based on criteria such as the:

- Potential for third party damage like dig-ins from construction;
- Potential for corrosion;
- Potential for ground movement; and
- Physical design and characteristics of the pipe segment.

As part of its risk management evaluation and planning process, PG&E also considers the proximity of a pipeline segment to high density populations and environmentally-sensitive areas, as well as potential reliability impacts. Based on all of these factors, the segments that warrant further evaluation, monitoring, or other future action, were included each year on a Top 100 list to help in the development of future plans for work on our transmission pipelines

Attached to this letter is a combined list of the segments included on PG&E's 2007, 2008 and/or 2009 Top 100 lists for long-range evaluation and planning, along with updated notes on their status as of February 10, 2011. As shown in the status summary, 86 percent of pipeline segments that were listed only in 2007 or 2008 have been completed. For segments on the 2009 list, 56 percent have been completed and the rest are in various phases of action.

For those segments on the 2009 list that PG&E made available in September 2010, PG&E has retained the same map numbers for ease of reference, and has provided updated information where applicable. This consolidated 2007-2009 list will be made available on PG&E's website.

Please contact me should you have any questions.

Sincerely,

Brian K. Cherry
Vice President, Regulatory Relations

cc: Michael R. Peevey, President
Timothy A. Simon, Commissioner
Mike Florio, Commissioner
Catherine Sandoval, Commissioner
Julie Fitch, Energy Division
Richard Clark, Consumer Protection Safety Division
Julie Halligan, Consumer Protection Safety Division
Frank Lindh, General Counsel
Harvey Y. Morris, Legal Division
Patrick S. Berdge, Legal Division
Joe Como, Division of Ratepayer Advocates

Long Range Gas Transmission Pipeline Planning Input
Top 100 Segments – 2007, 2008 and Updated 2009

PG&E's top priority is to ensure the safety of our natural gas system. PG&E employs a comprehensive inspection and monitoring program to help achieve this goal. PG&E monitors system status in real time on a 24-hour basis, and regularly conducts leak surveys, patrols and maintenance of all of its natural gas pipelines. **Any issues identified as a threat to public safety are immediately addressed.**

PG&E also uses the data it collects daily on its gas transmission pipeline system to help plan and prioritize future work as part of its long-term risk management planning. As described below, PG&E's "Top 100" lists have been a component of this risk management program. As part of our efforts to enhance operations, PG&E has begun developing our Pipeline 2020 program, which is focused on modernizing our pipeline infrastructure, spurring development of next-generation pipeline inspection technologies, enhancing public safety awareness and emergency response planning, and developing industry-leading best practices, including state-of-the-art risk assessment techniques. Going forward, PG&E will use these new risk management techniques to guide its future work.

PG&E's risk management tools include a program that evaluates data on each of the approximately 20,000 pipeline segments within PG&E's natural gas transmission pipeline system based on the following criteria:

- the potential for third party damage like dig-ins from construction,
- the potential for corrosion,
- the potential for ground movement, and
- the physical design and characteristics of the pipe segment.

PG&E also considers the proximity of a pipeline segment to high-density populations and environmentally-sensitive areas, as well as potential reliability impacts.

Based on all of these factors, PG&E determines which segments warrant further evaluation, monitoring or other future action. Historically, these segments have been included each year on a Top 100 list to help guide the development of future plans. As conditions changed from year to year, PG&E reevaluated which segments were included on the list.

The Top 100 lists were used as engineering planning tools. Their primary function has been to highlight segments for further engineering investigation, monitoring or other long-term follow-up, but they do not determine which segments are designated for immediate repair or replacement.

PG&E has taken a range of appropriate actions depending on circumstances specific to each segment referenced on a Top 100 list. For example, if a segment was listed due to a high level of construction activity in the area, PG&E might have enhanced the surface markings of the pipeline and conducted additional outreach to help avoid accidental dig-ins. In other circumstances, where, for example, a segment was on the list due to its physical design and characteristics, PG&E may have increased its monitoring, patrolling or proposed to replace the segment.

The list below includes the segments on PG&E's 2007, 2008 and/or 2009 lists for long-range evaluation and planning, along with updated notes on their status as of February 10, 2011. As shown in the status summary below, 86 percent of pipeline segments that were listed only in 2007 or 2008 have been completed. For segments on the 2009 list, 56 percent have been completed and the rest are in various phases of action.

For ease of reference, PG&E has retained the same map numbers used in the 2009 list submitted in September 2010. This list also is available on PG&E's website at http://www.pge.com/planninginput/, along with maps to assist customers with specific questions about the location of PG&E's natural gas transmission lines.

Factor Key:

A pipeline segment is identified for further study and long-range planning based upon its risk for one or more of five unique factors:

- **Potential for Third-Party Damage:** Third-party damage is the number one risk to PG&E's pipeline system. Indications that a pipe segment may be at risk for third-party damage include third-party construction activity in the immediate area of the pipeline's location, whether or not the line segment has a history of third-party damage, the depth of cover over the pipeline, the pipe diameter, the degree of surface marking available for the location of the pipe segment, and local awareness of the potential for third-party damage in the immediate area of the pipeline's location. Some of the actions PG&E would take to reduce this risk factor include additional marking of the pipeline location (when possible), additional education in the immediate area for the 811 system to call before digging, and monitoring of construction activity and/or permits in the area around the pipeline.

- **Potential for Corrosion:** Factors include items such as the external coating design, the resistivity of the soil, and other ground-based factors which could reduce the thickness of the pipe wall. Some of the actions PG&E would take to reduce this risk include regular and ongoing monitoring (PG&E monitors both electronically and by physically checking its cathodic

protection system every 2 months at over 6,000 locations in its natural gas transmission system), increasing or replacing the external protective coating of the pipe, or replacement of the pipe itself.

- **Potential for Ground Movement:** Factors include the proximity to seismically active areas, and the potential for soil erosion or landslides around the pipeline. Some of the actions PG&E would take to reduce this risk include increased monitoring, changing the soil material in which the pipe segment is buried, changing the alignment of the pipe segment, or burying the pipe segment at a greater depth beneath the ground level (for erosion prevention).

- **Physical Design and Characteristics:** Factors include items such as the age of pipe, the type of welding performed on the pipe, the fittings used in the pipeline, and the materials used to manufacture the pipe. Some of the actions PG&E would take to reduce this risk factor include replacement of the pipe or fittings in order to upgrade or improve the design or characteristics of the line segment or reducing pipeline pressure.

- **Overall:** A pipeline segment with an "Overall" factor is included on the list based upon its ranking in more than one of the factors outlined above but not based upon any single factor.

Rank:

PG&E's Top 100 list for a particular year was composed of the segments that ranked highest in each of the above five categories. It is important to note the "rank" that PG&E previously included in its 2009 Top 100 list and has also included in this combined 2007-2009 list is a relative ranking of these segments. PG&E has provided this "rank" as a means of comparing the total risk management score of a segment on a particular Top 100 list against the other segments on that list.

Status Key:

- **Monitoring:** PG&E is monitoring and reviewing these pipeline segments to see if they need to be addressed through a specific project.
- **Initiated:** PG&E has determined that the pipeline segment merits further study and analysis.
- **Engineering:** PG&E is defining the scope of the project and readying it for construction.
- **Construction:** PG&E has a project that is under construction.
- **Completed:** PG&E has determined that no further action is warranted on this segment due to the completion of an investigation that results in improved/updated pipeline information or the completion of an evaluation or construction project.

Regardless of status, every segment identified below remains within PG&E's comprehensive inspection and monitoring program discussed above. Any issues identified as a threat to public safety are immediately addressed.

Status Summary:

The following table provides a brief summary of the current status of the pipeline segments on PG&E's 2007, 2008 and 2009 Top 100 lists. Note that there are 78 pipeline segments on the 2007 and/or 2008 lists that do not also appear on the 2009 list. Also, note that the total number of individual segments on an annual list varies because some segments qualify for the list in more than one risk factor category (e.g., both for Potential for Ground Movement and Potential for Corrosion), reducing the total number of unique segments to less than 100. Conversely, in some years segments rank the same in a risk factor category, with these "ties" increasing the total number of segments to more than 100. For this reason, the 2007 list contains 85 segments and the 2008 list contains 110 segments. In total, there are 178 unique pipeline segments on the 2007-2009 Top 100 lists.

	Segments Only on 2007 and/or 2008 Lists		Current 2009 Segments	
Status as of February 2011	**Count**	**%**	**Count**	**%**
Completed	67	86%	56	56%
Construction or Engineering	8	10%	27	27%
Initiated or Monitoring	3	4%	17	17%
TOTALS	78	100%	100	100%

PG&E's goal is to be the best in class nationally on gas safety as we work to earn back the trust and confidence of our customers. Our current programs and the improvements that will come through our Pipeline 2020 program are key elements to achieving that goal.

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
1(a)	L103	Segment 117.1, Mile Points 11.00 – 11.42	San Benito	2007 2008 2009	Segment 117.1 is located in an unpopulated area on steep terrain which is particularly susceptible to ground motion. It will be replaced as part of a project to relocate 6 miles of pipe between H[Redacted] due to exposure to the [Redacted] and through hillsides which are susceptible to landslides and soil erosion problems.	Potential for Ground Movement	Engineering	'07: 71 '08: 94 '09: 71
1(b)	L103	Segment 117.3, Mile Points 11.42 – 11.42	San Benito	2007 2008	The ground movement risk for segment 117.3 was reduced based on PG&E's system-wide assessment of US Geological Survey data on the severity of erosion, including in the area in which this segment lies, causing this segment not to appear on the 2009 list. *(Notwithstanding its removal from the list, this segment of pipe is part of the project to relocate 6 miles of pipe between Hwy 156 and Crazy Horse Rd. near San Juan Bautista discussed at Map No. 1(a). Status: Engineering.)*	Potential for Ground Movement	Completed	'07: 77 '08: 94
1(c)	L103	Segment 117.5, Mile Points 11.42 – 11.65	San Benito	2007 2008 2009	See description for Map No. 1(a).	Potential for Ground Movement	Engineering	'07: 72 '08: 92 '09: 72
2(a)	L107	Segment 127.1, Mile Points 14.00 – 14.82	Alameda	2008 2009	This section of Line 107 is located across the [Redacted] [Redacted] Based upon a recently completed engineering analysis, PG&E plans to convert this section from transmission pipeline to distribution feeder main.	Physical Design & Characteristics	Engineering	'08: 90 '09: 74
2(b)	L107	Segment 127.5, Mile Points 14.82 – 15.12	Alameda	2008 2009	See description for Map No. 2(a).	Physical Design & Characteristics	Engineering	'08: 107 '09: 89/ 90
2(c)	L107	Segment 127.57, Mile Points 15.13 – 15.36	Alameda	2009	See description for Map No. 2(a).	Physical Design & Characteristics	Engineering	'09: 89/ 90

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
2(d)	L107	Segment 127.6, Mile Points 15.36 – 15.36	Alameda	2008 2009	See description for Map No. 2(a).	Physical Design & Characteristics	Engineering	'08: 104 '09:91
2(e)	L107	Segment 127.7, Mile Points 15.36 – 15.70	Alameda	2008 2009	See description for Map No. 2(a).	Physical Design & Characteristics	Engineering	'08: 100 '09: 79/80
3(a)	L107	Segment 129, Mile Points 15.89 – 16.40	Alameda (Livermore)	2008 2009	This section of Line 107 is located across the [Redacted] Redacted Based upon a recently completed engineering analysis, PG&E plans to convert this section from transmission pipeline to distribution feeder main..	Physical Design & Characteristics	Engineering	'08: 101 '09: 79/80
3(b)	L107	Segment 131.5, Mile Points 17.11 – 18.00	Alameda	2009	See description for Map No. 3(a).	Potential for Ground Movement	Engineering	'09: 82
3(c)	L107	Segment 132.2, Mile Points 18.00 – 18.67	Alameda	2007 2009	See description for Map No. 3(a).	Potential for Ground Movement	Engineering	'07: 69 '09: 73
4(a)	L107	Segment 139, Mile Points 21.07 – 22.29	Alameda	2007 2008 2009	This section of L107 is located across the open hills [Redacted] Redacted Based upon a recently completed engineering analysis, PG&E plans to convert this section from transmission pipeline to distribution feeder main. In addition, the external corrosion risk for segment 139 was reduced based on inspection of its coating condition, causing this segment not to appear on the 2009 list for potential corrosion (though the segment remained on the list for ground movement).	Potential for Ground Movement Potential for Corrosion (2007 and 2008)	Engineering	'07: 78 '08: 93 '09: 77

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
4(b)	L107	Segment 140, Mile Point 22.29	Alameda	2008	The external corrosion risk for segment 140 was reduced based on inspection of its coating condition, causing this segment not to appear on the 2009 list.	Potential for Corrosion	Completed	'08: 109
4(c)	L107	Segment 141, Mile Points 22.29 – 22.301	Alameda	2008	See description for Map No. 4(b).	Potential for Corrosion	Completed	'08: 108
4(d)	L107	Segment 141.8, Mile Points 22.34 – 22.79	Alameda	2008	See description for Map No. 4(b).	Potential for Corrosion	Completed	'08: 103
4(e)	L107	Segment 150, Mile Points 25.73 – 26.01	Alameda	2007 2008	The ground movement risk for this segment was reduced based on PG&E's system-wide reassessment of US Geological Survey data on the severity of erosion, including in the area in which this segment lies, causing this segment not to appear on the 2009 list.	Potential for Ground Movement	Completed	'07: 81 '08: 99
4(f)	L107	Segment 151, Mile Points 26.01 – 26.509	Alameda	2007 2008	See description for Map No. 4(e). *(Notwithstanding its removal from the list, PG&E plans to replace this segment in 2011 or 2012 in order to accommodate the work described on L131 below. See Map No. 14. Status: Engineering.)*	Potential for Ground Movement	Completed	'07: 61 '08: 77
5(a)	L108	Segment 111, Mile Points 6.25 – 6.82	San Joaquin	2007	This segment consists of 2,897 feet of pipe near [Redacted] and [Redacted] The external corrosion risk for this segment was reduced based on investigation of pipe strength and wall thickness, causing this segment not to appear on the 2008 and 2009 lists.	Potential for Corrosion	Completed	'07: 45
5(b)	L108	Segment 122.1, Mile Points 11.74 – 12.14	San Joaquin	2008	PG&E replaced this segment as part of a project that replaced 2.5 miles of pipe from [Redacted] [Redacted] due to the design materials used. Construction was completed in 2010.	Physical Design & Characteristics	Completed	'08: 81

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
5(c)	L108	Segment 122.3, Mile Points 12.14 – 12.16	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	’08: 82
5(d)	L108	Segment 123, Mile Points 12.16 – 12.47	San Joaquin	2007 2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	’07: 64 ’08: 78
5(e)	L108	Segment 123.7, Mile Points 12.47 – 12.51	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	’08: 67
5(f)	L108	Segment 123.8, Mile Points 12.51 – 12.59	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	’08: 53
5(g)	L108	Segment 124, Mile Points 12.59 – 12.69	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	’08: 54
5(h)	L108	Segment 124.3, Mile Points 12.69 – 12.70	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	’08: 46
5(i)	L108	Segment 124.6, Mile Points 12.70 – 12.72	San Joaquin	2008 2009	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	’08:38 ’09: 43/44
5(j)	L108	Segment 125, Mile Points 12.72 – 12.76	San Joaquin	2008 2009	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	08:49 ’09: 43/44
5(k)	L108	Segment 125.05, Mile Points 12.76 – 12.79	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	’08: 68

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
5(l)	L108	Segment 125.1, Mile Points 12.79 – 13.19	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	'08: 83
5(m)	L108	Segment 125.3, Mile Points 13.19 – 13.21	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	'08: 84
5(n)	L108	Segment 126, Mile Points 13.21 – 13.71	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	'08: 85
5(o)	L108	Segment 126.3, Mile Points 13.71 – 13.73	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	'08: 86
5(p)	L108	Segment 127, Mile Points 13.73 – 14.13	San Joaquin	2007 2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	'07: 65 '07: 87
5(q)	L108	Segment 127.3, Mile Points 14.13 – 14.15	San Joaquin	2008	See description for Map No. 5(b).	Physical Design & Characteristics	Completed	'08: 106
6(a)	L108	Segment 140.9, Mile Points 37.04 – 37.14	San Joaquin	2008	PG&E plans to replace this segment as part of a project to enable an in-line inspection assessment to be performed. PG&E plans to commence construction in 2011.	Potential for Third Party Damage	Engineering	'08: 50
6(b)	L108	Segment 144, Mile Points 38.00 – 38.17	San Joaquin	2007	The external corrosion risk for segment 144 was reduced based on inspection of its coating condition, causing this segment not to appear on the 2008 and 2009 lists.	Potential for Corrosion	Completed	'07: 50
6(c)	L108	Segment 145, Mile Points 38.17 – 39.00	San Joaquin	2007 2008	The external corrosion risk for segment 145 was reduced based on inspection of its coating condition, causing this segment not to appear on the 2009 list.	Potential for Corrosion	Completed	'07: 51 '08: 47

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
6(d)	L108	Segment 146.35, Mile Points 39.18 – 39.21	San Joaquin	2007 2008 2009	Replace 8,000 feet of pipe through the rural area near Armstrong Rd near Lodi due to the design materials used.	Physical Design & Characteristics Overall (2009)	Initiated	'07: 30 '08: 29 '09: 2/3/4
6(e)	L108	Segment 146.6, Mile Points 39.21 – 39.23	San Joaquin	2007 2008 2009	See description for Map No. 6(d).	Physical Design & Characteristics Overall (2009)	Initiated	'07: 31 '08: 30 '09: 2/3/4
6(f)	L108	Segment 147, Mile Points 39.23 – 39.47	San Joaquin	2007 2008 2009	See description for Map No. 6(d).	Physical Design & Characteristics Overall (2009)	Initiated	'07: 32 '08: 31 '09: 2/3/4
6(g)	L108	Segment 147.05, Mile Points 39.47–39.60 (33)	San Joaquin	2008	The external corrosion risk for segment 147.05 was reduced based on inspection of its coating condition, causing this segment not to appear on the 2009 list.	Potential for Corrosion	Completed	'08: 33
6(h)	L108	Segment 159, Mile Points 44.9 – 45.93	San Joaquin	2007	Replace 12,900 feet of pip[Redacted] due to the design materials used.	Physical Design & Characteristics	Initiated	'07: 76
7(a)	L108	Segment 179.5, Mile Points 62.57 – 63.29	Sacramento (Elk Grove)	2008 2009	Replace 8,000 feet of pipe fro[Redacted]n Elk Grove due to the design materials used. Construction is currently planned to commence in 2011.	Physical Design & Characteristics	Engineering	'08: 34 '09: 15
7(b)	L108	Segment 179.7, Mile Points 63.29 – 63.50	Sacramento (Elk Grove)	2007	See description for Map No. 7(a).	Physical Design & Characteristics	Engineering	'07: 60

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
8(a)	L109	Segment 137, Mile Points 15.00 – 15.38	Santa Clara (Palo Alto)	2007 2009	PG&E has adjusted the cathodic protection system to better protect these pipeline segments from corrosion. More recent analysis has shown marked improvement. No further action relative to the potential for external corrosion is contemplated at this time.	Potential for Corrosion	Completed	'07: 57 '09: 56
8(b)	L109	Segment 137.19, Mile Points 15.38 – 15.65	Santa Clara (Palo Alto)	2009	See description for Map No. 8(a).	Potential for Corrosion	Completed	'07: 59 '09: 60/61/62
8(c)	L109	Segment 137.2, Mile Points 16.80 – 16.93	Santa Clara (Palo Alto)	2007	See description for Map No. 8(a).	Potential for Corrosion	Completed	'07: 56
8(d)	L109	Segment 137.32, Mile Points 15.65 – 16.01	Santa Clara (Palo Alto)	2007 2009	See description for Map No. 8(a).	Potential for Corrosion	Completed	'09: 60/61/62
8(e)	L109	Segment 137.8, [1] Mile Points 16.19 – 16.33	Santa Clara (Palo Alto)	2007 2009	See description for Map No. 8(a).	Potential for Corrosion	Completed	'07: 58 '09: 60/61/62
8(f)	L109	Segment 148, Mile Points 19.71 – 20.43	San Mateo (Palo Alto)	2008	See description for Map No. 8(a).	Potential for Corrosion	Completed	'08: 79
9(a)	L114	Segment 106, Mile Points 3.18 – 3.80	Solano/ Sacramento	2009	PG&E has conducted an engineering review of the potential for ground movement along this segment, crossing the [Redacted] [Redacted] This project includes L114-2, segment 101, discussed at Map No. 24(b). Based on this review, PG&E is planning to replace this crossing in 2013.	Potential for Ground Movement	Engineering	'09: 84/85

[1] This segment number is referred to as segment number 137.08 in the 2007 Top 100 list.

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
9(b)	L114	Segment 120, Mile Points 7.32 – 7.69	Sacramento/ Contra Costa	2009	PG&E has evaluated the potential of rerouting gas to allow the removal of 7,500 feet of three pipeline segments (L-114, segment 120; L114-1, segment 103, discussed at Map No. 24(a); and SP4Z, segment 112, discussed at Map No. 24(c)) Redacted Redacted Redacted Based upon this evaluation, PG&E plans to remove these pipeline segments from service in 2011.	Potential for Ground Movement	Engineering	'09: 88/87
10	L114	Segment 153.2, Mile Points 28.00 – 28.87	Alameda	2009	Evaluate the potential replacement of 7,000 feet of pipe between Redacted Redacted d due to the potential for ground movement.	Potential for Ground Movement	Initiated	'09: 69
11	L130	Segment 101, Mile Points 0.00 – 0.50	Solano/ Sacramento	2009	PG&E has completed an engineering analysis of 4,000 feet of pipe crossing the Redacted due to the potential for ground movement. This section of pipeline is located underwater. In conjunction with the Army Corp. of Engineer's dredging project planned for 2013, PG&E plans to replace this crossing in 2013.	Potential for Ground Movement	Engineering	'09: 34
12(a)	L131	Segment 134.2, Mile Points 27.02 – 27.05	Alameda/ Contra Costa	2007	PG&E has evaluated the replacement of this section of L131, which is located over the steep hills Redacted e, and plans to replace this segment. In addition, as part of PG&E's transmission integrity management program, an in-line inspection assessment is planned for 2011.	Physical Design & Characteristics	Initiated	'07: 79

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
12(b)	L131	Segment 151, Mile Points 37.89 – 38.49	Alameda (Pleasanton)	2009	PG&E has evaluated the replacement of 4,990 feet of pipeline between Redacted and Redacted due to the potential for ground movement, and plans to replace this segment. This pipeline is located on the steep slopes over the Redacted In addition, as part of PG&E's transmission integrity management program, an in-line inspection is planned for 2011.	Potential for Ground Movement	Initiated	'09: 70
13	L131	Segment 157.2, Mile Points 42.16 – 42.35	Alameda (Sunol)	2007 2008 2009	Replace 1,350 feet of pipe a Redacted due to the potential for ground movement. This segment of L131 is located on a steep hillside in the Redacted Redacted Construction was completed in October 2010.	Potential for Ground Movement	Completed	'07: 53 '08: 60 '09: 59
14(a)	L131	Segment 164, Mile Points 46.34 – 46.84	Alameda (Fremont)	2007 2008	The ground movement risk for segment 164 was reduced based on PG&E's system-wide reassessment of US Geological Survey data on the severity of erosion, including in the area in which this segment lies, causing this segment not to appear on the 2009 list. *(Notwithstanding its removal from the list, this segment is part of the project to remove 22,363 feet of pipe between the Vargas Rd and Irvington Station from transmission service discussed at Map No. 14(b)., Status: Engineering)*	Potential for Ground Movement	Completed	'07: 84 '08: 105

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
14(b)	L131	Segment 165, Mile Points 46.96 – 48.23	Alameda (Fremont)	2007 2008 2009	PG&E plans to remove 22,363 feet of pipe between th[Redacted] [Redacted] from transmission service, either by converting the pipe to a distribution main or into an outer, un-pressurized casing in which a new pipeline would be inserted. This section of L131 is located over the steep slopes from the [Redacted] [Redacted] Construction to permanently remove this from transmission service currently is planned for 2012. In addition, as part of PG&E's transmission integrity management program, an in-line inspection assessment is planned for 2011.	Potential for Ground Movement	Engineering	'07: 42 '08: 45 '09: 31
14(c)	L131	Segment 167.9, Mile Points 48.94 – 49.36	Alameda (Fremont)	2007 2008 2009	See description for Map No. 14(b).	Potential for Ground Movement Overall	Engineering	'07: 33 '08: 21 '09: 12
14(d)	L131	Segment 169, Mile Points 49.38 – 50.46	Alameda (Fremont)	2007 2008 2009	See description for Map No. 14(b).	Potential for Ground Movement	Engineering	'07: 37 '08: 44 '09: 22
15	L131	Segment 115, Mile Points 7.39 – 7.75	Contra Costa/ Sacramento	2009	PG&E plans to complete an engineering review of 2,066 feet of pipe located in the rural area near S[Redacted] and the [Redacted] in 2011. Based on this review, PG&E will determine whether any repair, replacement or other action is warranted.	Potential for Ground Movement	Initiated	'09: 75

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
16(a)	L132	Segment 106, Mile Points 1.27 – 1.34	Santa Clara (San Jose)	2007	The ground movement risk for segment 106 was reduced based on PG&E's system-wide reassessment of US Geological Survey data, including on the ground movement risk associated with this segment, causing this segment not to appear on the 2008 and 2009 lists. *(Notwithstanding its removal from the list, PG&E currently plans to replace this segment as part of a project to replace pipe due to the potential for ground movement. PG&E plans to commence construction in 2012. Status: Engineering.)*	Potential for Ground Movement Overall	Completed	'07: 24
16(b)	L132	Segment 106.7, Mile Points 1.35 – 1.87	Santa Clara (San Jose)	2007 2009	PG&E plans to replace this segment as part of a project to replace pipe due to the potential for ground movement. PG&E plans to commence construction in 2012.	Potential for Ground Movement	Engineering	'07: 34 '09: 26
16(c)	L132	Segment 112.7, Mile Points 3.05 – 3.067	Santa Clara (Santa Clara)	2007 2008	This segment is part of a project to replace pipe and install other facilities in order to internally inspect L132 through the urban areas between Redacted PG&E plans to commence construction in 2012 and to complete the in-line inspection assessments in 2013.	Overall	Engineering	'07: 19 '08: 11
16(d)	L132	Segment 113, Mile Points 3.067 – 3.3	Santa Clara (Santa Clara)	2007 2008	See description for Map No. 16(c).	Overall	Engineering	'07: 16 '08: 6
16(e)	L132	Segment 189, Mile Points 42.13- 43.55	San Mateo (South San Francisco)	2007	The replacement of this segment in Redacted had been planned for 2009. However, analysis by PG&E's pipeline engineers in early 2008 showed that the segment did not need replacement at that time. This updated analysis was subsequently confirmed by a March 2009 direct assessment of this segment. PG&E currently plans to replace this segment in 2012.	Overall	Engineering	'07: 21

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
17(a)	L138	Segment 116, Mile Points 22.70 – 23.40	Fresno (Riverdale)	2007 2008 2009	PG&E has completed an engineering review of 6,061 feet of pipe between Redacted and Redact for susceptibility to external corrosion. Based on cathodic protection survey results, the cathodic protection was determined to be satisfactory. Due to the presence of an outer pipe casing, which is required for railroad crossings but also increases the potential for corrosion, PG&E will continue to monitor these segments to determine whether future action is warranted.	Potential for Corrosion	Monitoring	'07: 36 '08: 23 '09: 49
17(b)	L138	Segment 129, Mile Points 38.08 – 38.42	Fresno (Easton)	2007	PG&E reassessed this segment from 2007 to 2008 due to the relocation of a nearby highway to a greater distance from segment 129, lowering the risk associated for this segment. This segment does not appear on the 2008 and 2009 lists.	Potential for Corrosion	Completed	'07: 46
17(c)	L138	Segment 130,[2] Mile Points 38.42 – 38.58	Fresno	2007 2008 2009	PG&E plans to replace this segment due to the design materials used. Construction is planned to commence in 2012.	Physical Design & Characteristics	Initiated	'07: 28 '08: 35 '09: 16
17(d)	L138	Segment 130.11,[3] Mile Points 38.59 – 38.59	Fresno	2007 2008 2009	See description for Map No. 17(c).	Physical Design & Characteristics	Initiated	'07: 28 '08: 41 '09: 20
17(e)	L138	Segment 145, Mile Points 48.29 – 48.64	Fresno (Fresno)	2009	The third-party damage risk assessment for this segment increased in 2009 due to previous damage on a pipeline near this location. A subsequent engineering investigation concluded that this segment is not exposed to any elevated third party damage risk, that surface marking of the segment is adequate and therefore that no further action is warranted.	Potential for Third Party Damage	Completed	'09: 18

[2] In 2007, a portion of segment 130 was identified as segment 129.6. In 2008, that portion was renamed as segment 130.
[3] In 2007, segment 130.11 was identified as segment 129.6. In 2008, it was renamed as segment 130.11.

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
18	L147	Segment 110.6, Mile Points 3.26 – 3.28	San Mateo (San Carlos)	2009	PG&E has completed an engineering review of the design materials of 105 feet of pipe near E Redacted Redacted Based upon the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Physical Design & Characteristics	Completed	'09:46
19(a)	L173	Segment 102.1, Mile Points 1.01 – 1.11	Placer (Roseville)	2007 2008 2009	An engineering review of this pipeline segment nea Redacted Redacted has been conducted to assess risk for potential third-party damage. One third-party dig-in occurred nearby. Most of the area has been fully developed and the Blue Oak Redacte s overpass has been completed. The risk of third-party damage has been reduced and no further action is warranted.	Potential for Third Party Damage	Completed	'07: 41 '08: 39 '09: 38
19(b)	L173	Segment 102.6, Mile Points 1.45 – 1.50	Placer (Rocklin)	2008 2009	See description for Map No. 19(a).	Potential for Third Party Damage	Completed	'08: 42 '09: 29
20(a)	L187	Segment 154.2, Mile Points 58.47 – 58.48	Monterey	2007	This segment is located in a rural area nea Redacted Redacte It was assessed as having a potential for third-party damage. However, this assessment was revised in 2008 after PG&E conducted an additional public information program in the area and concluded that the risk of future third party damage was no longer as high, causing the segment not to appear on the 2008 or 2009 lists.	Potential for Third Party Damage	Completed	'07: 54
20(b)	L187	Segment 160, Mile Points 61.75 – 62.00	Monterey	2009	PG&E has completed an engineering review of 1,320 feet of pipe through the rural area near Redacted Redacted for the potential for damage by third parties. Based on this review, PG&E has performed notifications and installed additional line markers. No further action is warranted.	Potential for Third Party Damage	Completed	'09: 39

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
21(a)	L215	Segment 104, Mile Points 3.00 – 3.43	Stanislaus	2008 2009	PG&E conducted an engineering review of 3,310 feet of pipe between Redacted in Turlock based on corrosion monitoring data from segments 122.3 and 123. Three areas around the pipe were dug up to permit physical examinations of the pipe. Based on this review, no further action is warranted at this time.	Potential for Corrosion	Completed	'08: 75 '09: 65
21(b)	L215	Segment 122.3, Mile Points 19.46 – 19.48	Stanislaus (Turlock)	2008 2009	See description for Map No. 21(a).	Potential for Corrosion	Completed	'08: 69 '09: 63/64
21(c)	L215	Segment 123, Mile Points 19.56 – 19.74	Stanislaus (Turlock)	2008 2009	See description for Map No. 21(a).	Potential for Corrosion	Completed	'08: 66 '09: 63/64
22(a)	0401-01	Segment 104, Mile Points 2.40 – 2.48	Marin (San Rafael)	2007 2009	PG&E has completed an engineering review of 1,887 feet of pipe through the suburban area along Redacted Redacted Based upon the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Overall	Completed	'07: 8 '09: 99
22(b)	0401-01	Segment 104.8, Mile Points 2.48 – 2.76	Marin (San Rafael)	2008 2009	See description for Map No. 22(a).	Overall	Completed	'08: 4 '09: 14
23	0407-01	Segment 104.8, Mile Points 1.83 – 1.88	Napa (Napa)	2009	PG&E replaced 247 feet of pipe near Redacted Redacted in 2009.	Physical Design & Characteristics	Completed	'09: 45

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
24(a)	L114-1	Segment 103, Mile Points 7.33 – 7.73	Solano/ Sacramento	2009	PG&E has evaluated the potential of rerouting gas to allow the removal of 7,500 feet of three pipeline segments (L114-1, segment 103; L-114, segment 120, discussed at Map No. 9(b); and SP4Z, segment 112, discussed at Map No. 24(c)) crossing the Redacted due to the potential for ground movement. Based upon this evaluation, PG&E plans to remove these pipeline segments from service in 2011.	Potential for Ground Movement	Engineering	'09: 87/88
24(b)	L114-2	Segment 101, Mile Points 3.18 – 3.80	Solano/ Sacramento	2009	PG&E has completed an engineering review of the potential for ground movement along this segment, crossing the Redacted Reda and adjacent levees from Redacted This project includes L114, segment 106, discussed at Map No. 9(a). Based on this review, PG&E plans to replace this crossing in 2013.	Potential for Ground Movement	Engineering	'09: 84/85
24(c)	SP4Z	Segment 112, Mile Points 7.45 – 7.82	Solano/ Sacramento	2009	See description for Map No. 24(a).	Potential for Ground Movement	Engineering	'09: 83
25(a)	L118A	Segment 166.1, Mile Points 30.38 – 30.38	Madera	2008	The third-party damage risk for segment 166.1 was revised in 2009 after PG&E conducted an additional public information program in the area, causing the segment not to appear on the 2009 list. In addition, PG&E has confirmed that surface marking of the location is in place. Therefore, the risk of third-party damage has been reduced and no further action is warranted at this time.	Potential for Third Party Damage	Completed	'08: 96

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
25(b)	L118A	Segment 166.13, Mile Points 30.38 – 30.40	Madera	2007 2008 2009	An engineering review of this pipe segment near Redacted Redacted has been conducted to assess risk for potential third party damage. One third party dig-in occurred nearby. However, farming operations over the pipeline have since changed, and the pipeline now lies beneath a farm road. In addition, PG&E has confirmed that surface marking of the location is in place, and conducted an additional public information program in the area. Therefore, the risk of third-party damage has been reduced and no further action is warranted at this time.	Potential for Third Party Damage	Completed	'07: 75 '08: 97 '09: 76
25(c)	L118A	Segment 166.17, Mile Points 30.40 – 31.06	Madera	2007 2008 2009	See description for Map No. 25(b).	Potential for Third Party Damage	Completed	'07: 55 '08: 63 '09: 55
26	L119B	Segment 101, Mile Points 0.00 – 0.01	Sacramento (Sacramento)	2009	PG&E has completed an engineering review of the design materials of 1,437 feet of pipe Redacted Redacted. Based upon the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Physical Design & Characteristics	Completed	'09: 54
27(a)	1202-16	Segment 100, Mile Points 0.00 – 0.08	Fresno (Fresno)	2008 2009	The third-party risk on this line is elevated due in part to a third-party dig-in in the local area, which elevates the risk of nearby segments under PG&E's integrity management program. A subsequent engineering investigation concluded that this segment is not exposed to any elevated third-party damage risk, that the segment lies beneath pavement or developed surfaces, and therefore that no further action is warranted.	Potential for Third Party Damage	Completed	'08: 22 '09: 19
27(b)	1202-16	Segment 101, Mile Points 0.08 – 0.19	Fresno (Fresno)	2007 2008 2009	See description for Map No. 27(a).	Potential for Third Party Damage	Completed	'07: 38 '08: 24 '09: 23/24/25
27(c)	1202-16	Segment 101.1, Mile Points 0.19 – 0.27	Fresno (Fresno)	2008 2009	See description for Map No. 27(a).	Potential for Third Party Damage	Completed	'08: 25 '09: 23/24/25

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
27(d)	1202-16	Segment 101.2, Mile Points 0.27 – 0.49	Fresno (Fresno)	2009	All segments (10,331 feet) of pipe along Redacted between Redacted s have been evaluated. Seven excavations were performed to examine the pipe for potential corrosion. Four of the sites examined showed no corrosion, and the remaining three showed a minimal amount of corrosion. Additional investigation in 2010 indicated that while this segment is not exposed to any elevated external corrosion risk, minor adjustments to the cathodic protection levels may be appropriate. PG&E will continue to monitor cathodic protection levels in 2011 and make adjustments when necessary.	Potential for Corrosion	Monitoring	'09: 27
27(e)	1202-16	Segment 102, Mile Points 0.49 – 1.03	Fresno (Fresno)	2008 2009	See description for Map No. 27(a).	Potential for Third Party Damage	Completed	'08: 26 '09: 23/24/25
27(f)	1202-16	Segment 103, Mile Points 1.03 – 1.05	Fresno (Fresno)	2007 2008 2009	See description for Map No. 27(d).	Potential for Corrosion Overall	Monitoring	'07: 28 '08: 17 '09: 13
27(g)	1202-16	Segment 103.1, Mile Points 1.05 – 1.11	Fresno (Fresno)	2007 2009	See description for Map No. 27(d).	Potential for Corrosion	Monitoring	'07: 44 '09: 35
27(h)	1202-16	Segment 103.3, Mile Points 1.11 – 1.20	Fresno (Fresno)	2007 2009	See description for Map No. 27(d).	Potential for Corrosion	Monitoring	'07: 39 '09: 33
27(i)	1202-16	Segment 115, Mile Points 1.67 – 2.42	Fresno (Fresno)	2007 2008 2009	See description for Map No. 27(d).	Potential for Corrosion Overall	Monitoring	'07: 23 '08: 15 '09: 21
27(j)	1202-16	Segment 117, Mile Points 2.58 – 2.59	Fresno (Fresno)	2007 2008 2009	See description for Map No. 27(d).	Overall	Monitoring	'07: 20 '08: 14 '09: 97

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
28	L142S	Segment 114, Mile Points 7.30 – 8.70	Kern (Bakersfield)	2009	PG&E conducted an in-line inspection of 7,425 feet of pipe along Redacted due to the potential for external corrosion, and made all necessary repairs. As part of its monitoring effort, PG&E will conduct another in-line inspection of this line in September 2011.	Potential for Corrosion	Monitoring	'09: 28
29	1509-04	Segment 106, Mile Points 0.78 – 0.88	Sutter (Yuba City)	2009	PG&E has conducted an engineering review of 531 feet of pipe through the suburban area near Redacted Redacted for the potential for damage by third parties. Two third-party dig-ins occurred nearby. However, development around the pipeline has since been completed; the pipeline is now under a roadway and a landscape easement. Therefore, the risk of third-party damage has been reduced.	Potential for Third Party Damage	Completed	'09: 47
30(a)	1509-05	Segment 120.1, Mile Points 6.23 – 6.28	Sutter (Yuba City)	2007 2008 2009	PG&E has conducted an engineering review of 1,371 feet of pipe through the suburban area Redacted Redacted for the potential for damage by third parties. Two third-party dig-ins occurred nearby. However, development around the pipeline has since been completed; the pipeline is now under a roadway and a landscape easement. Therefore, the risk of third-party damage has been reduced.	Potential for Third Party Damage	Completed	'07: 49 '08: 61 '09: 36/37
30(b)	1509-05	Segment 120.2, Mile Points 6.28 – 6.29	Sutter (Yuba City)	2007 2008 2009	See description for Map No. 30(a).	Potential for Third Party Damage	Completed	'07: 52 '08: 65 '09: 48
30(c)	1509-05	Segment 120.3, Mile Points 6.29 – 6.33	Sutter (Yuba City)	2007 2008 2009	See description for Map No. 30(a).	Potential for Third Party Damage	Completed	'07: 40 '08: 62 '09: 36/37
30(d)	1509-05	Segment 121, Mile Points 6.33 – 6.49	Sutter (Yuba City)	2007 2009	See description for Map No. 30(a).	Potential for Third Party Damage	Completed	'07: 43 '09: 40

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
31	1815-15	Segment 130.3, Mile Points 2.04 – 2.13	Monterey	2007 2008 2009	PG&E plans to complete an engineering review of 437 feet of pipe through the suburban area near [Redacted] near [Redacte] by June 2011. Based on this review, PG&E will determine whether any repair, replacement or action is warranted. In addition, as part of PG&E's transmission integrity management program, an external corrosion direct assessment is planned for 2011.	Overall	Initiated	'07: 5 '08: 9 '09: 5
32(a)	L195A 3-1	Segment 100, Mile Points 0.00 – 0.00	Sacramento (Isleton)	2009	In 2010 PG&E isolated this segment (i.e., capped the pipe at both ends to prevent gas supply from reaching this segment) to mitigate the risk of damage by third-parties. No further action is warranted.	Potential for Third Party Damage	Completed	'09: 57/58
32(b)	L195A 3-1	Segment 102, Mile Points 0.00 – 0.04	Sacramento (Isleton)	2009	See description for Map 32(a).	Potential for Third Party Damage	Completed	'09: 57/58
32(c)	L195A 3-1	Segment 102.1, Mile Points 0.04 – 0.17	Sacramento (Isleton)	2009	See description for Map 32(a).	Potential for Third Party Damage	Completed	'09: 42
33(a)	L210A	Segment 116, Mile Points 14.15 – 16.00	Solano (Fairfield)	2008	The third-party damage risk assessment for this segment increased in 2008 due to previous damage on a pipeline near this location. A subsequent engineering investigation concluded that this segment is not exposed to any elevated third party damage risk, that surface marking of the segment is adequate and therefore that no further action is warranted. *(Notwithstanding its removal from the list, PG&E plans to perform an internal line inspection on this segment in 2011. See Map No. 33b. Status: Initiated.)*	Potential for Third Party Damage	Completed	'08: 37

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
33(b)	L210A	Segment 117.5, Mile Points 18.73 – 18.86	Solano (Fairfield)	2008 2009	Construction has been completed to install equipment and modify the pipeline to allow an in-line inspection to be conducted. An in-line inspection assessment is scheduled for 2011.	Overall Potential for Ground Movement	Completed (Construction) Initiated (In-Line Insp.)	'08: 20 '09: 1
33(c)	L210A	Segment 117.6, Mile Points 18.86 – 18.96	Solano (Fairfield)	2007 2008	See description for Map No. 33(a).	Potential for Third Party Damage	Completed	'07: 47 '08: 51
33(d)	L210A	Segment 118.1, Mile Points 18.97 – 19.47	Solano (Fairfield)	2007 2008 2009	See description for Map No. 33(b).	Overall	Completed (Construction) Initiated (In-Line Insp.)	'07: 4 '08: 1 '09: 10
34(a)	L300A	Segment 240.3, Mile Points 277.85 – 278.01	Kern (Bakersfield)	2008 2009	PG&E has conducted an engineering review of this pipeline segment located in the suburban area between Redacted and Redacted or the potential for damage by third parties. This segment was relocated due to the widening of the road and no further action is warranted.	Potential for Third Party Damage	Completed	'08: 36 '09: 30
34(b)	L300A	Segment 240.61, Mile Points 278.01 – 278.10	Kern (Bakersfield)	2009	See description for Map No. 34(a).	Potential for Third Party Damage	Completed	'09: 32

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
35(a)	L300B	Segment 193, Mile Points 161.02 – 161.07	San Bernardino	2009	PG&E has completed an engineering review of the design materials of 843 feet of pipe through the rural area. Based on this review, PG&E determined that no repair, replacement or other action was warranted. In addition, as part of PG&E's transmission integrity management program, an external corrosion direct assessment is planned for 2011.	Physical Design & Characteristics	Completed	'09: 67/68
35(b)	L300B	Segment 194, Mile Points 161.43 – 161.48	San Bernardino	2009	See description for Map No. 35(a)	Physical Design & Characteristics	Completed	'09: 67/68
36(a)	L316A	Segment 111, Mile Points 0.61 – 0.78	Contra Costa	2009	PG&E has completed an engineering review of 7,777 feet of pipe between Redacted Redacted Based on cathodic protection survey results, the cathodic protection was determined to be adequate. No further assessment or work is planned at this time.	Potential for Corrosion	Completed	'09: 92
36(b)	L316A	Segment 112, Mile Points 0.79 – 1.00	Contra Costa	2009	See description for Map No. 36(a).	Potential for Corrosion	Completed	'09: 94
36(c)	L316A	Segment 113, Mile Points 1.00 – 1.09	Contra Costa	2009	See description for Map No. 36(a).	Potential for Corrosion	Completed	'09: 86
36(d)	L316A	Segment 115, Mile Points 1.19 – 1.23	Contra Costa (Jersey Is)	2009	See description for Map No. 36(a).	Potential for Corrosion	Completed	'09: 81
36(e)	L316A	Segment 116, Mile Points 1.23 – 2.05	Contra Costa (Jersey Is)	2009	See description for Map No. 36(a).	Potential for Corrosion	Completed	'09: 78

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
36(f)	L316A	Segment 117, Mile Points 2.05 – 2.31	Contra Costa (Bethel Is)	2009	See description for Map No. 36(a).	Potential for Corrosion	Completed	'09: 93
37	DCUST 1416	Segment 100, Mile Points 0.00 – 0.01	Humboldt (Ferndale)	2007 2008 2009	PG&E has conducted an engineering review of 28 feet of pipe through the rural area near [Redacted] [Redacted] PG&E has determined that no repair, replacement or other action is warranted.	Potential for Ground Movement Overall	Completed	'07: 14 '08: 2 '09: 6
38	DFDS 3543	Segment 100, Mile Points 10.91 – 10.91	Marin (Novato)	2007 2009	PG&E has completed an engineering review of 3 feet of pipe near [Redacted]. Based the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Overall	Completed	'07: 18 '09: 11
39(a)	DRIP 7966	Mile Points 0.00 – 0.00	Santa Clara (San Jose)	2007 2009	PG&E has completed an engineering review of the potential for ground movement along 10 feet of pipe near [Redacted] [Redacted]. Based upon the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Potential for Ground Movement	Completed	'09: 7 '07: 7
39(b)	DRIP 7970	Segment 651, Mile Points 0.00 – 0.00	Santa Clara (San Jose)	2007	PG&E completed an engineering review of the physical design and characteristics of this 10 foot pipeline segment located near [Redacted] Based upon the results of this review, PG&E determined that no repair, replacement or other action was warranted.	Physical Design & Characteristics Overall	Completed	'07: 7
40	DRIP 7971	Segment 651, Mile Points 0.00 – 0.00	Santa Clara (Milpitas)	2007 2009	PG&E has completed an engineering review of the potential for ground movement along 10 feet of pipe near [Redacted] [Redacted] Based upon the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Potential for Ground Movement	Completed	'07: 1 '09: 17

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
41(a)	SP3	Segment 160.3, Mile Points 198.49 – 198.49	Contra Costa (San Pablo)	2008 2009	Replace approximately 300 feet of pipe inside PG&E's Redac Redacted due to the potential for ground movement. Construction is planned for 2012. The small section of pipeline that includes this segment has been isolated (i.e., closed valves at both ends to prevent gas supply from reaching this segment) from the rest of PG&E's system, reducing its overall risk.	Potential for Ground Movement	Engineering	'08: 48 '09: 41
41(b)	SP3	Segment 160.36, Mile Points 198.49 – 198.49	Contra Costa (San Pablo)	2008 2009	See description for Map No. 41(a).	Potential for Ground Movement	Engineering	'08: 56 '09: 50/51/52/ 53
41(c)	SP3	Segment 160.4, Mile Points 198.49 – 198.49	Contra Costa (San Pablo)	2008 2009	See description for Map No. 41(a).	Potential for Ground Movement	Engineering	'08: 57 '09: 50/51/52/ 53
41(d)	SP3	Segment 160.5, Mile Points 198.49 – 198.52	Contra Costa (San Pablo)	2008 2009	See description for Map No. 41(a).	Potential for Ground Movement	Engineering	'08: 58 '09: 50/51/52/ 53
41(e)	SP3	Segment 160.6, Mile Points 198.52 – 198.55	Contra Costa (San Pablo)	2008 2009	See description for Map No. 41(a).	Potential for Ground Movement	Engineering	'08: 59 '09: 50/51/52/ 53
42(a)	X6337	Segment 100, Mile Points 10.84 – 10.84	Marin (Novato)	2007 2009	PG&E has completed an engineering review of two 30-foot Redacted Redact Based upon the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Physical Design & Characteristics Overall	Completed	'07: 12 '09: 8/9
42(b)	X6337	Segment 101, Mile Points 10.84 – 10.84	Marin (Novato)	2007 2009	See description for Map No. 42(a).	Physical Design & Characteristics Overall	Completed	'07: 13 '09: 8/9

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
43	X6526	Segment 505, Mile Points 0.24 – 0.24	Kings (Kettleman City)	2009	PG&E has conducted an engineering review of the design materials of about 9 feet of pipe through the rural area Redacted Redacted Based upon the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Physical Design & Characteristics	Completed	'09: 66
44	DREG 4197	Segment 801, Mile Points 0.00 – 0.00	San Mateo (Palo Alto)	2007 2008 2009	PG&E has completed an engineering review of 18 feet of pipe near Redacted in Redacted lto. Based upon the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Overall	Completed	'07: 22 '08: 19 '09: 95
45(a)	7221-15	Segment 101, Mile Points 0.04 – 1.31	Stanislaus (Modesto)	2007 2008 2009	PG&E has completed an engineering review of 6,709 feet of pipe along Redacted Based on this review, PG&E determined that no repair, replacement or other action was warranted.	Overall Physical Design & Characteristics	Completed	'07: 3 '08: 40 '09: 96
45(b)	7221-15	Segment 102.3, Mile Points 1.44-1.51	Stanislaus (Modesto)	2007 2008	See description for Map No. 45(a).	Overall	Completed	'07: 17 '08: 32
46	DREG 3875	Segment 101, Mile Points 0.00 – 0.00	Marin (Novato)	2009	PG&E has completed an engineering review of 285 feet of pipe near R Redacted . Based upon the results of this review, PG&E has determined that no repair, replacement or other action is warranted.	Overall	Completed	'09: 98
47	STUB 7912	Segment 551, Mile Points 0.04 – 0.04	Stanislaus (Modesto)	2007 2009	PG&E has completed an engineering review of 2 feet of pipe near Redacted in Modesto as part of the effort described at Map No. 45(a). Based on this review, PG&E determined that no repair, replacement or other action was warranted.	Overall	Completed	'07: 6 '09: 100

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
48(a)	L150	Segment 118.3, Mile Points 17.51 – 17.89	Yolo (Davis)	2008	PG&E plans to remove this segment of [Redacted]. and [Redacted] from transmission service by converting the pipe to a distribution main or retiring it. Construction to permanently remove this segment from transmission service currently is planned for 2011.	Overall	Engineering	'08: 12
48(b)	L150	Segment 118.8, Mile Points 18.08 – 18.09	Yolo (Davis)	2007 2008	See description for Map No. 48(a).	Overall	Engineering	'07: 25 '08: 10
48(c)	L150	Segment 119, Mile Points 18.09 – 18.0913	Yolo (Davis)	2007 2008	See description for Map No. 48(a).	Overall	Engineering	'07: 15 '08:3
49	L220	Segment 134.2, Mile Points 22.14 – 22.17	Yolo (Davis)	2007	This segment consists [Redacted] in Davis. This segment was assigned a lower risk value in 2008 based upon improved external corrosion information, causing it not to appear on the 2008 list. The risk value of the segment was lowered further in 2009 based upon improved geophysical information. No repair, replacement or other action is warranted.	Overall	Completed	'07: 27
50	L314	Segment 127, Mile Points 28.11 – 28.83	San Bernardino (Victorville)	2008	PG&E inspected the coating condition of this segment (4,446 feet of pipe through the rural area along [Redacted] [Redacted] in 2008 and reduced the external corrosion risk as a result of this inspection, causing it not to appear on the 2009 list.	Potential for Corrosion	Completed	'08: 74
51	L402	Segment 130, Mile Points 24.00 – 25.00	Shasta	2008	The third-party damage risk assessment for this segment increased in 2008 due to previous third-party damage to this segment. A subsequent engineering investigation concluded that this segment is not exposed to any elevated third party damage risk, that surface marking of the segment is adequate and therefore that no further action is warranted.	Potential for Third Party Damage	Completed	'08: 43

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
52	0126-01	Segment 101, Mile Points 0.00 – 0.1409	Contra Costa (Richmond)	2007	This segment consists of 745 feet of pipe nea Redacted Redacted. Its potential for corrosion was reduced after PG&E determined that the segment lay in soil which was less corrosive than previously assessed and did not have an outer pipe casing. This reassessment caused the segment not to appear on the 2008 and 2009 lists.	Potential for Corrosion	Completed	'07: 73
53	L057A	Segment 103, Mile Points 7.48 – 9.04	Contra Costa (Brentwood)	2007	PG&E conducted a survey of this pipeline segment near Redacted to assess its potential susceptibility to external corrosion. Based upon the information obtained from that survey regarding the adequacy of the cathodic protection system and the pipeline coating condition, PG&E determined that no repair or replacement of this segment was warranted.	Potential for Corrosion	Completed	'07: 80
54	0603-01	Segment 101.2, Mile Points 0.005 – 0.20	Solano (Fairfield)	2008	PG&E conducted an investigation of this segment of pipe through the suburban area along Redacted. Based upon the results of this investigation, PG&E determined that no repair, replacement or other action was warranted.	Overall	Completed	'08: 16
55	0646-01	Segment 115.3, Mile Points 10.25 – 10.31	Yolo	2008	This segment consists of 302 feet of pipe in a rural area along Redacted PG&E improved the cathodic protection of this segment, reducing the external corrosion risk and causing it not to appear on the 2009 list.	Potential for Corrosion	Completed	'08: 98
56	L119A	Segment 109.7, Mile Points 8.57 – 8.58	Yolo	2007 2008	The third-party damage risk assessment for this segment increased in 2007 due to previous third-party damage to this segment. A subsequent engineering investigation concluded that this segment is not exposed to any elevated third party damage risk, that surface marking of the segment is adequate and therefore that no further action is warranted.	Potential for Third Party Damage	Completed	'07: 62 '08: 72
57(a)	L124B	Segment 123.5, Mile Points 20.04 – 20.10	Yuba (Olivehurst)	2008	The external corrosion risk for this segment was reduced based on an inspection of its coating condition, causing this segment not to appear on the 2009 list.	Potential for Corrosion	Completed	'08: 76

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
57(b)	L124B	Segment 125, Mile Points 20.35 – 20.55	Yuba (Marysville)	2008	See description for Map No. 57(a).	Potential for Corrosion	Completed	'08: 89
58(a)	L126B	Segment 103, Mile Points 1.43 – 2.16	Humboldt (Eureka)	2007 2008	The fault crossing in this area (16,197 feet of pipe near New Redacted was assigned a lower risk value in 2009 based upon improved geophysical information, causing it not to appear on the 2009 list.	Potential for Ground Movement	Completed	'07: 85 '08: 110
58(b)	L126B	Segment 104, Mile Points 2.17 – 2.73	Humboldt (Eureka)	2007 2008	See description for Map No. 58(a).	Potential for Ground Movement	Completed	'07: 83 '08: 102
58(c)	L126B	Segment 105, Mile Points 2.73 – 4.00	Humboldt (Eureka)	2007 2008	See description for Map No. 58(a). The external corrosion risk for this segment was reduced based on inspection of its coating condition, causing this segment not to appear on the 2008 and 2009 lists for potential for corrosion.	Potential for Ground Movement Potential for Corrosion (2007)	Completed	'07: 48 '08: 55
58(d)	L126B	Segment 106, Mile Points 4.00 – 4.69	Humboldt (Eureka)	2007 2008	See description for Map No. 58(c).	Potential for Ground Movement Potential for Corrosion (2007)	Completed	'07: 74 '08: 95
58(e)	L126B	Segment 106.85, Mile Points 4.70 – 4.7183	Humboldt (Eureka)	2007	The external corrosion risk for segment 106.85 was reduced based on inspection of its coating condition, causing this segment not to appear on the 2008 and 2009 lists.	Potential for Corrosion	Completed	'07: 82
58(f)	L126B	Segment 107.6, Mile Points 5.093 – 5.13	Humboldt (Eureka)	2007 2008	See description for Map No. 58(a).	Potential for Ground Movement	Completed	'07: 35 '08: 27

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
59	1301-01	Segment 124, Mile Point 0.00	Sonoma (Petaluma)	2008	The third-party damage risk assessment for this segment increased in 2008 due to previous third-party damage to this segment. This segment is now located inside a fenced PG&E station. A subsequent engineering investigation of this area confirmed that this segment is not exposed to any elevated third party damage risk and therefore that no further action was warranted.	Overall	Completed	'08: 18
60(a)	L138C	Segment 105.3, Mile Points 44.72 – 44.81	Fresno (Fresno)	2008	PG&E conducted a survey of this pipeline running along [Redacted] and [Redacted] for susceptibility to external corrosion. Based upon the information obtained from that survey regarding the adequacy of the cathodic protection system, PG&E determined that no repair, replacement or other action was warranted.	Potential for Corrosion	Completed	'08: 52
60(b)	L138C	Segment 105.6, Mile Points 44.81 – 44.90	Fresno (Fresno)	2008	See description for Map No. 60(a).	Potential for Corrosion	Completed	'08: 64
61	L142S	Segment 116.3, Mile Points 8.9927 – 9.01	Kern (Bakersfield)	2007	This segment consists of 65 feet of pipe along [Redacted] [Redacted] The external corrosion risk for this segment was reduced based on inspection of its coating condition, causing the segment not to appear on the 2008 and 2009 lists.	Potential for Corrosion	Completed	'07: 68
62	L162A	Segment 113.2, Mile Points 7.07 – 7.22	San Joaquin (Tracy)	2007 2008	This segment consists of 814 feet of pipe near [Redacted] and [Redacted] In 2009, PG&E updated its system-wide risk assessment of certain properties relative to the external corrosion risk which reduced the relative risk for this segment, and the risk due to third party damage for this segment in particular was reduced due to an additional public information program. This segment does not appear on the 2009 list.	Overall	Completed	'07:26 '08: 7

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
63	L177A	Segment 215.1 Mile Points 170.57 – 171.00	Humboldt (Fortuna)	2008	The fault crossing in this area (2,251 feet of pipe near Redact Redacted was assigned a lower risk value in 2009 based upon improved geophysical information, causing it not to appear on the 2009 list.	Potential for Ground Movement	Completed	'08: 28
64(a)	L181B	Segment 104.6, Mile Points 2.17 – 2.18	Monterey	2007 2008	The third-party damage risk assessment for this segment increased in 2007 due to previous third-party damage to this segment. A subsequent engineering investigation concluded that this segment is not exposed to any elevated third party damage risk, that surface marking of the segment is adequate and therefore that no further action is warranted.	Potential for Third Party Damage	Completed	'07: 67 '08: 88
64 (b)	L181B	Segment 104.8, Mile Points 2.18 – 2.21	Monterey	2007 2008	See description for Map No. 64(a).	Potential for Third Party Damage	Completed	'07: 66 '08: 80
65	L197B	Segment 105, Mile Points 4.14 – 4.40	San Joaquin	2008	The third-party damage risk assessment for this segment increased in 2008 due to previous damage on a pipeline near this location. A subsequent engineering investigation concluded that this segment is not exposed to any elevated third party damage risk, that surface marking of the segment is adequate and therefore that no further action is warranted.	Potential for Third Party Damage Overall	Completed	'08: 5
66	L300A	Segment 369.051, Mile Points 473.09 – 473.99	Santa Clara (San Martin)	2008	This segment consists of 4,780 feet of pipe Redacted . and Redacted The risk of third-party damage was reduced based on analysis of the depth of cover over this segment, which found the cover to be adequate.	Potential for Third Party Damage	Completed	'08: 73
67(a)	L300B	Segment 336.0, Mile Points 362.7061 – 362.7087	Fresno	2007	This segment is located nea Redacted near Redacted In 2007, PG&E conducted a survey of these pipeline segments to assess their potential susceptibility to external corrosion. Based upon the information obtained from that survey regarding the functioning of the cathodic protection system and the pipeline coating condition, PG&E determined that no repair or replacement of these segments was warranted.	Potential for Corrosion	Completed	'07: 70

Map No.	Pipeline	Segment	Location: County (City)	Year On List	Description as of February 2011	Factor	Status as of February 2011	Rank
67(b)	L300B	Segment 336.5, Mile Points 362.8785 – 362.883	Fresno	2007	See description for Map No. 67(a).	Potential for Corrosion	Completed	'07: 63
67(c)	L300B	Segment 336.9, Mile Points 362.89 – 362.90	Fresno	2008	This segment consists of 69 feet of pipe near [Redacted]. In 2007, PG&E conducted a survey of pipeline segments in this area to assess their potential susceptibility to external corrosion. Based upon the information obtained from that survey regarding the functioning of the cathodic protection system and the pipeline coating condition, PG&E determined that no repair or replacement of these segments was warranted.	Potential for Corrosion	Completed	'08: 70
68	L302W	Segment 107.5, Mile Points 5.01 – 5.13	Yolo	2008	This segment consists of [Redacted] PG&E plans to complete an assessment of an adjacent segment for susceptibility to external corrosion in 2011. Based on this assessment, PG&E will determine whether any repair, replacement, or other action is warranted.	Potential for Corrosion	Initiated	'08: 71
69	DREG 4102	Segment 801, Mile Points 0.00 – 0.02	Yolo (Davis)	2007 2008	PG&E conducted an engineering review of this pipeline segment located near [Redacted] Based upon the results of this review, PG&E determined that no repair, replacement or other action was warranted.	Overall Physical Design & Characteristics (2007)	Completed	'07: 2 '08: 8
70(a)	Stub 8484	Segment 301, Mile Points 0.0034 – 0.0042	Alameda (Union City)	2007	PG&E conducted an engineering review in 2008 of this 2 foot segment located near [Redacted] Re. Based on review of pipe characteristics, this segment does not appear on the 2008 and 2009 lists.	Overall	Completed	'07: 10
70(b)	Stub 8485	Segment 301, Mile Points 0.00 – 0.002	Alameda (Union City)	2007 2008	PG&E has conducted an engineering review of this pipeline segment located near [Redacted] Re das y. Based on review of pipe characteristics, this segment does not appear on the 2009 list.	Overall	Completed	'07: 11 '08: 13