Appendix C: Table of Violations Revised as of 4/18/13, pursuant to ALJ Ruling

Violations relating to PG&E's fabrication and construction of Segment 180 on Line 132.

Violations	Duration	Reference 1
PU Code 451 – failure to safely construct segment 180 ²	1956-09/09/2010	OII, p. 2. CPSD-1, p. 3, p. 162, pp. 15-23.
PU Code 451 – installing pipe that did not meet industry standards	1956-09/09/2010	OII, p. 2. CPSD-1, p. 3, p. 162, pp. 15-23.
PU Code 451 – violation of ASME B31.1.8-1955 (§810.1) by installing sections unsafe for operational conditions	1956-09/09/2010	<u>CPSD-1, p. 3, p. 162, pp.</u> <u>15-23.</u>
PU Code 451 – violation of ASME B31.1.8-1955 (§811.412(c)) by not conducting a hydrostatic test	1956-09/09/2010	CPSD-1, p. 19; over 20 other references to the failure to hydro-test in CPSD-1. CPSD-9, pp. 33- 34.
PU Code 451 – violation of ASME B31.1.8-1955 (§811.27(A) by failing to visually inspect segments	1956-09/09/2010	CPSD-1, p. 4, p. 162, p. 19. CPSD-9, p. 96.
PU Code 451 – violation of API 5LX (§VI) by installing pups less than five feet	1956-09/09/2010	CPSD-1, p. 22, p. 162. CPSD-9, p. 94.

_

¹ Pursuant to the ALJ's Ruling on April 2, 2013, (as clarified by the subsequent ALJ ruling on April 12), CPSD provides a reference to the factual bases in the OII or one or more of its referenced documents that provides PG&E with notice of the allegation listed in the first column. CPSD is only providing a reference sufficient to demonstrate that adequate notice was provided to PG&E – the reference is not meant to provide all factual bases that prove the violation. The underlined portions are the new additions to the Appendix C that was first filed with CPSD's Opening Brief.

The violations described in Appendix C are intended to be a shorthand reference to the violations in Appendix B; each contain the same 55 violations. Appendix C was created in response to a request by ALJ Wetzell in order to clarify the date ranges that each violation was ongoing.

PU Code 451 – violation of ASME B31.1.8-1955 (§805.54) by installing segments that did not meet the appropriate minimum yield strength	1956-09/09/2010	CPSD-1, p. 7, p. 13, pp. 19-20, p. 22, pp. 64-65, p. 162. CPSD-9, pp. 46-50.
PU Code 451 – violation of ASME B31.1.8-1955 (§811.27(G)) by assigning a yield strength above 24,000psi on a segment of unknown yield strength	1956-09/09/2010	CPSD-1, p. 31, p. 15, p. 19. CPSD-9, p. 61, p. 108.
PU Code 451 – violation of ASME B31.1.8-1955 (§811.27(E)) by using deficient welds	1956-09/09/2010	CPSD-1, p. 13, p. 19, pp. 20-21, p. 162. CPSD-9, pp. 41-43, pp. 95-96.
PU Code 451 – violation of Section 1.7 of API Standard 1104 (4 th Ed 1956) by using deficient welds	1956-09/09/2010	CPSD-1, p. 13, p. 19, pp. 20-21, p. 162. CPSD-9, pp. 41-43, pp. 95-96.
PU Code 451 – violation of ASME B31.1.8-1955 (§811.27(C)) by using incomplete welds and failing to measure wall thickness	1956-09/09/2010	CPSD-1, p. 21, p. 7, p. 19, p. 56, p. 61, p. 63, CPSD- 9, pp. 27-28, pp. 41-43, pp. 92-96.
PU Code 451 – failure to incorporate pups in calculating the design pressure and MAOP	1956-09/09/2010	CPSD-1, pp. 22-24, p. 3, p. 162. CPSD-9, p. 106.
PU Code 451 – violation of ASME B31.1.8-1955 (§845.22) failure to meet MAOP determination requirements due to incomplete knowledge	1956-09/09/2010	CPSD-1, pp. 22-24, p. 3, p. 162. CPSD-9, p. 106.

Violations relating to PG&E's Integrity Management Program.

Violations	Duration	Reference
49 CFR 192.107(b)(2) – failure to assign a yield strength of 24,000 psi when strength was unknown	08/19/1970 - 09/09/2010	CPSD-1, p. 31. CPSD-9, p. 61, p. 106, p. 108.
49 CFR 192.917(b) – failure to gather and integrate required pipeline data	12/15/2003 - 09/09/2010	CPSD-1, pp. 26-30, p. 163. CPSD-9, p. 60, p. 69, p. 70, p. 85.
49 CFR 192 (incorporating ASME B31.1.8S (§5.7)) – failure to check for & verify accuracy of data	08/19/1970 – 09/09/2010	CPSD-1, p. 26, pp. 28-29, p. 55. CPSD-9, p. 107, p. 110, p. 114.
49 CFR 192.917(a) (incorporating ASME B31.8S (§2.2)) – failure to analyze manufacture threat of weld defect	12/15/2003 - 09/09/2010	<u>CPSD-1, pp. 33-36.</u> <u>CPSD-9, p. 36-39.</u>
49 CFR 192.917(e)(3) – failure to consider DSAW as potentially subject to manufacturing defects	12/15/2003 – 09/09/2010	CPSD-1, pp. 32-34, p. 41, pp. 46-47, p. 163. CPSD-9, p. 36.
49 CFR 192.917(e), and 192.917(e)(3)(i) – failure to consider risks after operating above MOP of last five years	12/11/2003 – 09/09/2010	<u>CPSD-1, pp. 42-44.</u> <u>CPSD-9, pp. 36-38.</u>
49 CFR 192.917(e)(3)(i) – failure to consider risk unstable and prioritize assessment of risks after operating above MOP of last five years	12/11/2003 — 09/09/2010	<u>CPSD-1, pp. 42-44.</u> <u>CPSD-9, pp. 36-38.</u>
49 CFR 192.917(e)(2) – failure to consider and test for cyclic fatigue	12/15/2003 – 09/09/2010	CPSD-1, p. 38, pp. 50-54, p. 26, p. 28, p. 36, p. 163. CPSD-9, p. 38.

49 CFR 192.921(a) – failure to use and inspection method capable of finding seam issues	12/15/2003 - 09/09/2010	CPSD-1, pp. 26-27, p. 47, p. 48, pp. 59-61, p. 134, p. 163.
49 CFR 192.917(e)(4) – failure to properly inspect or test after exceeding MOP on ERW pipe	12/11/2003 - 09/09/2010	CPSD-9, p. 36.
49 CFR 192 (incorporating ASME B31.8S (§4.4)) – failure to identify where and how unsubstantiated data was used in threat identification	12/15/2003 – 09/09/2010	CPSD-1, pp. 27-29, p. 31, pp. 56-57. CPSD-9, pp. 60-61.
49 CFR 192.917(c) (incorporating ASME B31.8S (§5.7)) – failure to (1) consider identified threats in risk assessment; (2) consider past events on Line 132; and (3) account for missing/questionable data	12/15/2003 – 09/09/2010	CPSD-1, pp. 26-27, pp. 32-25, pp. 54-61. CPSD-9, p. 39, p. 162.
49 CFR 192.917(c) (incorporating ASME B31.8S (§5)) – failure to use risk algorithms that: (1) properly weighed threats know via operating experience; (2) identified the proper potential impact radius; (3) identified the proper Consequences of Failure formula; (4) used conservative values for electrical interference; (5) considered one-call tickets; and (6) considered historic problems with pipe type	12/15/2003 — 09/09/2010	CPSD-1, p. 37, pp. 55-59.
PU Code 451 – violation of ASME B31.8S, Appendix A (§4.2) by failing to use conservative data	12/15/2003 — 09/09/2010	CPSD-1, p. 26, p. 28, pp. 30-32, p. 46, pp. 55-56, p. 58, p. 162. CPSD-9, pp.

where data was missing		<u>60-61.</u>
PU Code 451 – failure to safely operate its system by its practice of pressure spiking every 5 years to avoid testing or inspecting	12/15/2003 — 09/09/2010	CPSD-1, p. 40, pp. 42-44. CPSD-9, pp. 36-38.

Violations relating to PG&E's SCADA system and the Milpitas Terminal.

Violations	Duration	Reference
49 CFR 192.13(c) – failure to follow internal work procedures	09/09/2010	<u>CPSD-1, p. 4, p. 70, pp.</u> 84-85, p. 163. CPSD-9, pp. 90-91.
PU Code 451 – failure to follow internal work procedures to the extent it created an unsafe condition	09/09/2010	CPSD-1, p. 4, p. 70, pp. 84-85, p. 163. CPSD-9, pp. 90-91.
49 CFR 192.605(c) – failure to establish procedures for abnormal conditions	09/09/2010	OII, p. 2. CPSD-1, p. 4, p. 70, 84-85, p. 163. CPSD-9, pp. 90-91.
PU Code 451 – failure to properly maintain the Milpitas Station	02/2010 — 09/09/2010	CPSD-1, pp. 81-82, pp91- 92, pp. 94-95, pp. 98-99.
PU Code 451 – failure to design a SCADA system without too many unnecessary alarms	2005 - 09/09/2010	OII, p. 2. CPSD-1, p. 4, pp. 70-72, pp. 73-74, p. 92, p. 96, p. 98, p. 99.

Violations relating to PG&E's Emergency Response.

Violations	Duration	Reference
PU Code 451 – failure to create and follow adequate emergency plans	08/31/2009 — 09/09/2010	OII, p. 2. CPSD-1, pp. 113-116, pp. 116-125.
49 CFR 192.615(a)(3) – failure to have a prompt and effective response due to inconsistent emergency plans	08/31/2009 — 09/09/2010	<u>CPSD-10</u> , p. 76; <u>CPSD-1</u> , pp. 55-56, p. 114 (FN 221), p. 117.
49 CFR 192.615(a)(8) – failure to create a mutual assistance agreement with local first responders	08/31/2009 — 09/09/2010	CPSD-1, p. 114 (FN 221), pp. 117-118; CPSD-9, pp. 55-56; CPSD-10, p.76. CPSD propounded DR Legal Division 001-Q08 to obtain PG&E's Emergency Response Plan (ERP), which is hearing exhibit CPSD-297. Mutual Assistance Agreements are discussed on F-2.1 of PG&E's ERP.
49 CFR 192.615(c)(4) – failure to plan how to engage in mutual assistance	08/31/2009 - 09/09/2010	CPSD-1, p. 114 (FN 221), pp. 117-118; CPSD-9, pp. 55-56; CPSD-10, p.76. CPSD propounded DR Legal Division 001-Q08 to obtain PG&E's Emergency Response Plan (ERP), which is hearing exhibit CPSD-297. Mutual Assistance Agreements are discussed on F-2.1 of PG&E's ERP.

49 CFR 192.615(a)(3) – failure to have a prompt and effective	09/09/2010	<u>CPSD-1, pp. 102-103, p.</u> <u>114 (FN 221), pp. 117-</u>
response due to a slow and uncoordinated response		118; CPSD-9, pp. 55-56, pp. 97-100.
49 CFR 192.615(a)(1) – failure to adequately receive, identify and classify emergency notices	09/09/2010	CPSD-1, pp. 115-116, 118; CPSD-9, pp. 55-56, pp. 98-102; CPSD-10, p. 75, p. 77.
49 CFR 192.615(a)(4) – failure to provide for proper personnel and resources at the emergency scene	09/09/2010	<u>CPSD-1, pp. 120-122;</u> <u>CPSD-9, pp. 55-56, p. 99.</u>
49 CFR 192.615(a)(6) – failure to perform an emergency shutdown ³ to adequately minimize hazards to life and property	09/09/2010	CPSD-1, pp. 103, 117- 118, 120-122; CPSD-9, pp. 99, 101-102.
49 CFR 192.615(a)(7) – failure to make safe any actual or potential hazards to life and property	09/09/2010	<u>CPSD-1, pp. 117-118,</u> <u>120-122; CPSD-9, pp. 55-</u> <u>56, p. 99, pp. 101-102.</u>
49 CFR 192.615(a)(8) – failure to notify local first responders	09/09/2010	<u>CPSD-1, p. 114, p. 118;</u> <u>CPSD-9, pp. 55-56, pp.</u> <u>100-101.</u>
49 CFR 192.605(c)(1) and (3) – failure to have emergency manual that required the appropriate actions ⁴	08/31/2009 — 09/09/2010	CPSD-1, pp. 117-118; CPSD-1, pp. 119-122; CPSD-9, pp. 55-56, pp. 99-100.
49 CFR 192.615(a)(2) – failure to establish and maintain communications with local first	09/09/2010	<u>CPSD-1, pp. 118-119;</u> <u>CPSD-9, p. 100.</u>

_

³ The description of this violation insufficiently summarized Conclusion of Law #41 in Appendix B by omitting "perform an emergency shutdown".

[&]quot;perform an emergency shutdown".

This allegation is a very abbreviated summary of proposed Conclusion of Law #44, which states: PG&E violated 49 CFR Part 192.605(c)(1) and (3) by failing to have an emergency manual that properly directed its employees to respond to and correct the cause of Line 132's decrease in pressure, and its malfunction which resulted in hazards to persons and property, and notify the responsible personnel when notice of an abnormal operation is received.

responders		
49 CFR 192.615(a)(5) – failure to protect people first then property	09/09/2010	<u>CPSD-1, pp. 118-119;</u> <u>CPSD-9, p. 100.</u>
49 CFR 192.615(c)(4) – failure to establish and maintain a liaison with local first responders	08/31/2009 - 09/09/2010	CPSD-1, pp. 118-119; CPSD-9, p. 100.
49 CFR 192.615(a)(3) – failure to properly train personnel to recognize incidents	09/09/2010	CPSD-1, pp. 102-103, p. 114, p. 123; CPSD-10, p. 14. CPSD-9, p. 21, pp. 98-99.
49 CFR 192.615(b)(2) – failure to properly train personnel and ensure they are knowledgeable about procedures	09/09/2010	CPSD-1, pp. 102-103, p. 114, p. 123; CPSD-10, pp. 14-15. CPSD-9, p. 21, pp. 98-99.
49 CFR 192.615(b)(3) – failure to determine if training is effective	09/09/2010	CPSD-1, pp. 102-103, p. 114, p. 123; CPSD-9, p. 21, pp. 98-99.
49 CFR 192.605(c)(4) – failure to periodically review its emergency response	09/09/2010	CPSD-1, pp. 102-103, p. 114, p. 123; CPSD-9, p. 21, pp. 98-99.
49 CFR 192.616(d) – failure to properly education the public and local officials	09/09/2010	CPSD-1, pp. 123-125; CPSD-9, pp. 57-59, p. 77, p. 115.
49 CFR 199.225(a) – failure to perform alcohol tests in a timely manner and failure to record the reasons for lack of compliance	09/09/2010	CPSD-1, pp. 99-101. CPSD-9, pp. 21-22, pp. 104-105.
49 CFR 199.225(a) and 49 CFR 199.105(b) – failure to perform drug and alcohol tests Gas Control staff	09/09/2010	CPSD-1, pp. 99-101. CPSD-9, pp. 21-22, pp. 104-105.

Violations relating to PG&E's Safety Culture.

Violations	Duration	Reference
PU Code 451 – failure to place safety over profits by: reducing safety-related budgets; spending less than authorized on safety; prematurely ending its transmission pipeline replacement plan; not seeking sufficient O&M funds; using less effective and cheaper IM tools; reducing safety-related personnel; while at the same time using retained earnings to pay dividends, repurchasing stock, providing bonuses,	Duration 01/01/1998 – 09/09/2010	Reference OII, p. 2. CPSD-1, p. 3. CPSD-1, Chapter IX, pp. 126-161. CPSD-168, passim.
expending funds on public relations and ballot initiatives.		