Rulemaking: R.11-02-019
(U 39 G)
Exhibit No.:
Date: November 4, 2011
Witness: Todd R. Hogenson

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# PACIFIC GAS AND ELECTRIC COMPANY

# PIPELINE SAFETY ENHANCEMENT PLAN
# (IMPLEMENTATION PLAN)

## UPDATED WORKPAPER PAGES SUPPORTING

## CHAPTER 3
## GAS TRANSMISSION PIPELINE MODERNIZATION PROGRAM

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**PACIFIC GAS AND ELECTRIC COMPANY**
**IMPLEMENTATION PLAN**

# CHAPTER 3
# GAS TRANSMISSION PIPELINE MODERNIZATION PROGRAM

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# CHAPTER 3
# GAS TRANSMISSION PIPELINE MODERNIZATION PROGRAM

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Pacific Gas and Electric Company
Implementation Plan
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UPDATED 11/04/11

Table 2
Capital Expenditures by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 97000512 | 24254 | SP-3 REPL 0.04mi MP 167.28-198.48 PH1 | 44A | 7/1/2012 | - | 235,000 | - | - | **235,000** | WP 3-7 | WP 3-579 |
| 2 | 97000661 | 24909 | SP4Z REPL 0.07mi MP 8.21-8.29 PH1 | 44A | 7/1/2012 | - | 374,000 | - | - | **374,000** | WP 3-11 | WP 3-580 |
| 3 | | | **Total MAT 44A - StanPac Capital** | | | **-** | **609,000** | **-** | **-** | **609,000** | | |
| 4 | | | | | | | | | | | | |
| 5 | 30842206 | 23796 | L-021C REPL 0.75MI MP 31.84-35.05 PH1 | 2H1 | 12/1/2014 | - | - | 496,000 | 4,464,000 | **4,960,000** | WP 3-14 | WP 3-581 |
| 6 | 30843897 | 24052 | L-021D REPL 2.26MI MP 18.96-24.49 PH1 | 2H1 | 12/1/2013 | - | 1,453,000 | 13,076,000 | - | **14,529,000** | WP 3-17 | WP 3-582 |
| 7 | 30842239 | 23727 | L-021F REPL 4.24MI MP 0.00-21.16 PH1 | 2H1 | 12/1/2013 | 1,755 | 2,043,245 | 18,366,000 | - | **20,411,000** | WP 3-20 | WP 3-583 |
| 8 | 30843899 | 24055 | L-021H REPL 0.61MI MP 0.00-6.42 PH1 | 2H1 | 12/1/2014 | - | - | 239,000 | 2,148,000 | **2,387,000** | WP 3-24 | WP 3-584 |
| 9 | 30842207 | 23790 | L-050A REPL 0.24MI MP 16.81-17.03 PH1 | 2H1 | 12/1/2014 | - | - | 139,000 | 1,255,000 | **1,394,000** | WP 3-28 | WP 3-585 |
| 10 | 30842247 | 23758 | L-050A-1 REPL 0.09MI MP 0.66-2.32 PH1 | 2H1 | 7/1/2012 | - | 603,000 | - | - | **603,000** | WP 3-31 | WP 3-586 |
| 11 | 30843924 | 24059 | L-057A REPL 7.60MI MP 8.97-16.68 PH1 | 2H1 | 12/1/2013 | 150,000 | 2,511,000 | 25,444,000 | - | **28,105,000** | WP 3-34 | WP 3-587 |
| 12 | 30843925 | 24060 | L-057A-MT REPL 0.03MI MP 0.56-0.58 PH1 | 2H1 | 7/1/2014 | - | - | - | 203,000 | **203,000** | WP 3-37 | WP 3-588 |
| 13 | 30842170 | 23799 | L-057B REPL 0.01MI MP 10.32-10.32 PH1 | 2H1 | 7/1/2012 | - | 1 | - | - | **1** | WP 3-40 | WP 3-589 |
| 14 | 30842171 | 23818 | L-101 REPL 0.02MI MP 9.28-9.30 PH1 | 2H1 | 7/1/2012 | - | 1 | - | - | **1** | WP 3-43 | WP 3-590 |
| 15 | 30842130 | 23728 | L-103 REPL 7.75MI MP 5.68-23.56 PH1 | 2H1 | 12/1/2014 | 150,000 | 2,649,000 | - | 26,008,000 | **28,807,000** | WP 3-46 | WP 3-591 |
| 16 | 30865387 | 24897 | L-105A-1 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2012 | - | 162,000 | - | - | **162,000** | WP 3-49 | WP 3-592 |
| 17 | 30865388 | 24898 | L-105N-3 REPL 0.03MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2013 | - | - | 185,000 | - | **185,000** | WP 3-52 | WP 3-593 |
| 18 | 30865389 | 24899 | L-105N-5 REPL 0.10MI MP 36.39-36.47 PH1 | 2H1 | 7/1/2012 | - | 507,000 | - | - | **507,000** | WP 3-55 | WP 3-594 |
| 19 | 30843913 | 24077 | L-108_1 REPL 1.06MI MP 37.14-38.17 PH1 | 2H1 | 12/1/2014 | 25,000 | - | 328,000 | 3,181,000 | **3,534,000** | WP 3-58 | WP 3-595 |
| 20 | 30842211 | 23815 | L-108_2 REPL 2.58MI MP 48.18-50.69 PH1 | 2H1 | 12/1/2014 | 25,000 | - | 1,016,000 | 9,116,000 | **10,157,000** | WP 3-61 | WP 3-596 |
| 21 | 30865390 | 24900 | L-108_3 REPL 3.06MI MP 63.50-73.58 PH1 | 2H1 | 12/1/2013 | 25,000 | 1,273,000 | 11,434,000 | - | **12,732,000** | WP 3-64 | WP 3-597 |
| 22 | P.03741 | 23365 | L-109_1 REPL 3.70MI MP 3.41-9.89 PH1 | 2H1 | 12/1/2012 | 5,300,000 | 27,315,000 | - | - | **32,615,000** | WP 3-67 | WP 3-598 |
| 23 | 30842248 | 23724 | L-109_2 REPL 4.65MI MP 0.49-16.93 PH1 | 2H1 | 12/1/2013 | 150,000 | 3,156,000 | 34,070,000 | - | **37,376,000** | WP 3-70 | WP 3-599 |
| 24 | 30842212 | 23704 | L-109_3 REPL 6.06MI MP 16.93-24.00 PH1 | 2H1 | 12/1/2014 | 150,000 | 350,000 | 4,431,000 | 43,470,000 | **48,401,000** | WP 3-74 | WP 3-600 |
| 25 | 30842214 | 23692 | L-109_4 REPL 6.84MI MP 24.84-33.26 PH1 | 2H1 | 12/1/2014 | 150,000 | 350,000 | 3,459,000 | 35,626,000 | **39,585,000** | WP 3-78 | WP 3-601 |
| 26 | 30842224 | 23795 | L-109_5 REPL 0.13MI MP 34.39-45.84 PH1 | 2H1 | 12/1/2012 | 132,000 | 1,190,000 | - | - | **1,322,000** | WP 3-81 | WP 3-602 |
| 27 | 30842215 | 23832 | L-111A REPL 6.61MI MP 19.30-27.53 PH1 | 2H1 | 12/1/2012 | 1,887,000 | 28,532,000 | - | - | **30,419,000** | WP 3-84 | WP 3-603 |
| 28 | 30843920 | 24084 | L-114_1 REPL 0.06MI MP 16.51-16.57 PH1 | 2H1 | 7/1/2012 | - | 285,000 | - | - | **285,000** | WP 3-87 | WP 3-604 |
| 29 | 30841472 | 23688 | L-114_2 REPL 7.50MI MP 9.03-28.98 PH1 | 2H1 | 12/1/2012 | 616,000 | 35,431,000 | - | - | **36,047,000** | WP 3-90 | WP 3-605 |
| 30 | 30842216 | 23888 | L-116 REPL 0.04MI MP 0.00-0.03 PH1 | 2H1 | 7/1/2013 | - | - | 112,000 | - | **112,000** | WP 3-95 | WP 3-606 |
| 31 | 30865391 | 24901 | L-118-1 REPL 0.02MI MP 0.01-0.03 PH1 | 2H1 | 7/1/2013 | - | - | 236,000 | - | **236,000** | WP 3-98 | WP 3-607 |
| 32 | 30842245 | 23743 | L-118A REPL 6.87MI MP 5.62-12.55 PH1 | 2H1 | 12/1/2013 | 150,000 | 1,895,000 | 18,296,000 | - | **20,341,000** | WP 3-101 | WP 3-608 |
| 33 | 30842164 | 23791 | L-119B REPL 0.29MI MP 8.96-9.22 PH1 | 2H1 | 12/1/2013 | - | 104,000 | 939,000 | - | **1,043,000** | WP 3-104 | WP 3-609 |
| 34 | 30865392 | 24902 | L-119B-1 REPL 0.03MI MP 0.00-0.03 PH1 | 2H1 | 7/1/2012 | - | 129,000 | - | - | **129,000** | WP 3-107 | WP 3-610 |
| 35 | 30842218 | 23822 | L-123 REPL 4.16MI MP 0.00-7.51 PH1 | 2H1 | 12/1/2014 | 25,000 | - | 1,005,000 | 9,023,000 | **10,053,000** | WP 3-110 | WP 3-611 |
| 36 | 30843915 | 24079 | L-124A REPL 4.32MI MP 20.63-26.27 PH1 | 2H1 | 12/1/2013 | - | 1,698,000 | 15,280,000 | - | **16,978,000** | WP 3-113 | WP 3-612 |
| 37 | 30842219 | 23793 | L-125 REPL 1.31MI MP 0.00-0.00 PH1 | 2H1 | 12/1/2014 | 277 | - | 451,723 | 4,065,000 | **4,517,000** | WP 3-116 | WP 3-613 |
| 38 | 30841610 | 23677 | L-130 REPL 0.48MI MP 0.00-0.50 PH1 | 2H1 | 12/1/2013 | - | 385,000 | 3,463,000 | - | **3,848,000** | WP 3-119 | WP 3-614 |
| 39 | 30841473 | 23694 | L-131_1 REPL 1.69MI MP 32.38-35.87 PH1 | 2H1 | 12/1/2012 | 1,198,000 | 10,485,000 | - | - | **11,683,000** | WP 3-122 | WP 3-615 |
| 40 | 30841475 | 23746 | L-131_2 REPL 0.29MI MP 8.15-8.44 PH1 | 2H1 | 12/1/2012 | 135,000 | 1,212,000 | - | - | **1,347,000** | WP 3-126 | WP 3-616 |



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Table 2
Capital Expenditures by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | 30865393 | 24903 | L-131Y REPL 0.01MI MP 0.02-0.54 PH1 | 2H1 | 7/1/2012 | - | 79,000 | - | - | **79,000** | WP 3-129 | WP 3-617 |
| 42 | 30865394 | 24904 | L-132B REPL 0.01MI MP 0.01-0.01 PH1 | 2H1 | 7/1/2013 | - | - | 70,000 | - | **70,000** | WP 3-132 | WP 3-618 |
| 43 | 30843909 | 24072 | L-134A REPL 0.18MI MP 31.17-31.34 PH1 | 2H1 | 12/1/2014 | - | - | - | 641,000 | **641,000** | WP 3-135 | WP 3-619 |
| 44 | 30842161 | 23765 | L-136 REPL 0.01MI MP 9.69-9.70 PH1 | 2H1 | 7/1/2014 | - | - | - | 61,000 | **61,000** | WP 3-138 | WP 3-620 |
| 45 | 30842223 | 23825 | L-138 REPL 6.51MI MP 38.58-45.09 PH1 | 2H1 | 12/1/2012 | 1,650,000 | 29,838,000 | - | - | **31,488,000** | WP 3-141 | WP 3-621 |
| 46 | 30843888 | 24041 | L-138C REPL 0.01MI MP 43.58-43.59 PH1 | 2H1 | 7/1/2012 | - | 134,000 | - | - | **134,000** | WP 3-145 | WP 3-622 |
| 47 | 30843889 | 24042 | L-138D REPL 0.01MI MP 45.10-45.10 PH1 | 2H1 | 7/1/2014 | - | - | - | 54,000 | **54,000** | WP 3-148 | WP 3-623 |
| 48 | 30841613 | 23816 | L-142S REPL 1.06MI MP 0.0027-6.35 PH1 | 2H1 | 12/1/2012 | 373,000 | 3,354,000 | - | - | **3,727,000** | WP 3-151 | WP 3-624 |
| 49 | 30842131 | 23735 | L-151-1 REPL 0.02MI MP 10.44-10.45 PH1 | 2H1 | 7/1/2014 | - | - | - | 100,000 | **100,000** | WP 3-154 | WP 3-625 |
| 50 | 30865395 | 24905 | L-153-6 REPL 0.03MI MP 0.00-0.03 PH1 | 2H1 | 7/1/2012 | - | 181,000 | - | - | **181,000** | WP 3-157 | WP 3-626 |
| 51 | 30842225 | 23731 | L-162A REPL 1.12MI MP 6.62-7.72 PH1 | 2H1 | 12/1/2014 | - | - | 541,000 | 4,873,000 | **5,414,000** | WP 3-160 | WP 3-627 |
| 52 | 30842227 | 23845 | L-167 REPL 10.72MI MP 22.56-34.52 PH1 | 2H1 | 12/1/2013 | 22,967 | 2,660,033 | 23,898,000 | - | **26,581,000** | WP 3-163 | WP 3-628 |
| 53 | 30842228 | 23797 | L-167-1 REPL 2.09MI MP 4.46-6.55 PH1 | 2H1 | 12/1/2012 | 615,000 | 5,539,000 | - | - | **6,154,000** | WP 3-166 | WP 3-629 |
| 54 | 30842229 | 23926 | L-172A REPL 0.04MI MP 69.79-79.13 PH1 | 2H1 | 7/1/2012 | - | 162,000 | - | - | **162,000** | WP 3-169 | WP 3-630 |
| 55 | 30865396 | 24906 | L-172A-1 REPL 0.19MI MP 78.53-78.72 PH1 | 2H1 | 12/1/2013 | - | - | 702,000 | - | **702,000** | WP 3-172 | WP 3-631 |
| 56 | 30842236 | 23800 | L-172A-17-3 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2013 | - | - | 26,000 | - | **26,000** | WP 3-175 | WP 3-632 |
| 57 | 30842230 | 23824 | L-173 REPL 0.01MI MP 5.51-5.51 PH1 | 2H1 | 7/1/2013 | - | - | 91,000 | - | **91,000** | WP 3-179 | WP 3-633 |
| 58 | 30842232 | 23789 | L-177A REPL 3.27MI MP 25.46-173.89 PH1 | 2H1 | 12/1/2014 | - | - | 777,000 | 6,997,000 | **7,774,000** | WP 3-182 | WP 3-634 |
| 59 | 30843916 | 24080 | L-177E REPL 1.04MI MP 0.19-1.23 PH1 | 2H1 | 12/1/2014 | - | - | 189,000 | 1,696,000 | **1,885,000** | WP 3-185 | WP 3-635 |
| 60 | 30842234 | 23772 | L-181A REPL 1.73MI MP 15.31-16.81 PH1 | 2H1 | 12/1/2012 | 456,000 | 4,105,000 | - | - | **4,561,000** | WP 3-188 | WP 3-636 |
| 61 | 30842233 | 23782 | L-181A-10 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 65,000 | **65,000** | WP 3-191 | WP 3-637 |
| 62 | 30842235 | 23773 | L-181B REPL 0.36MI MP 2.17-10.32 PH1 | 2H1 | 12/1/2012 | 140,000 | 1,256,000 | - | - | **1,396,000** | WP 3-194 | WP 3-638 |
| 63 | 30843906 | 24067 | L-185 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 53,000 | **53,000** | WP 3-197 | WP 3-639 |
| 64 | 30841618 | 23748 | L-191 REPL 1.97MI MP 0.07-6.47 PH1 | 2H1 | 12/1/2013 | 25,000 | 2,049,000 | 18,171,000 | - | **20,245,000** | WP 3-200 | WP 3-640 |
| 65 | 30865397 | 24907 | L-191B REPL 0.01MI MP 1.63-1.64 PH1 | 2H1 | 7/1/2014 | - | - | - | 68,000 | **68,000** | WP 3-203 | WP 3-641 |
| 66 | 30841612 | 23702 | L-196A REPL 1.52MI MP 11.93-13.45 PH1 | 2H1 | 12/1/2013 | - | 263,000 | 2,362,000 | - | **2,625,000** | WP 3-206 | WP 3-642 |
| 67 | 30843898 | 24053 | L-200A-2 REPL 0.51MI MP 0.48-1.00 PH1 | 2H1 | 12/1/2013 | - | 112,000 | 1,003,000 | - | **1,115,000** | WP 3-209 | WP 3-643 |
| 68 | 30842237 | 23698 | L-210A REPL 2.10MI MP 19.69-25.62 PH1 | 2H1 | 12/1/2012 | 778,000 | 6,998,000 | - | - | **7,776,000** | WP 3-212 | WP 3-644 |
| 69 | 30842240 | 23867 | L-220 REPL 5.77MI MP 18.73-34.92 PH1 | 2H1 | 12/1/2013 | - | 2,396,000 | 21,388,000 | - | **23,784,000** | WP 3-215 | WP 3-645 |
| 70 | 30841463 | 23484 | L-300B REPL 0.36MI MP 160.88-248.97 PH1 | 2H1 | 12/1/2014 | - | - | 188,000 | 1,689,000 | **1,877,000** | WP 3-219 | WP 3-646 |
| 71 | 30842242 | 23770 | L-301A REPL 0.07MI MP 0.00-17.69 PH1 | 2H1 | 7/1/2012 | 10,776 | 186,224 | - | - | **197,000** | WP 3-222 | WP 3-647 |
| 72 | 30842243 | 23777 | L-301B REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 76,000 | **76,000** | WP 3-225 | WP 3-648 |
| 73 | 30842244 | 23792 | L-301C REPL 0.01MI MP 17.26-17.26 PH1 | 2H1 | 7/1/2012 | - | 109,000 | - | - | **109,000** | WP 3-228 | WP 3-649 |
| 74 | 30842246 | 23779 | L-301G REPL 0.01MI MP 2.34-2.34 PH1 | 2H1 | 7/1/2012 | - | 1 | - | - | **1** | WP 3-231 | WP 3-650 |
| 75 | 30843887 | 24040 | L-306 REPL 0.03MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 128,000 | **128,000** | WP 3-234 | WP 3-651 |
| 76 | 30842250 | 23775 | L-310 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 60,000 | **60,000** | WP 3-237 | WP 3-652 |
| 77 | 30841464 | 23798 | L-314 REPL 0.57MI MP 20.31-20.91 PH1 | 2H1 | 12/1/2014 | - | - | 104,000 | 932,000 | **1,036,000** | WP 3-240 | WP 3-653 |
| 78 | 30842125 | 23742 | L-314A REPL 0.08MI MP 0.15-0.24 PH1 | 2H1 | 7/1/2013 | - | - | 190,000 | - | **190,000** | WP 3-243 | WP 3-654 |
| 79 | 30865398 | 24908 | L-331B-1 REPL 0.02MI MP 0.74-0.76 PH1 | 2H1 | 7/1/2014 | - | - | - | 1 | **1** | WP 3-246 | WP 3-655 |
| 80 | 30842122 | 23831 | L-400 REPL 0.06MI MP 115.31-115.37 PH1 | 2H1 | 7/1/2014 | - | - | - | 388,000 | **388,000** | WP 3-249 | WP 3-656 |



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Table 2
Capital Expenditures by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81 | 30841476 | 23736 | DFM-0107-01 REPL 0.24MI MP 0.00-0.24 PH1 | 2H1 | 12/1/2014 | - | - | 122,000 | 1,100,000 | **1,222,000** | WP 3-254 | WP 3-657 |
| 82 | 30842180 | 23774 | DFM-0107-02 REPL 0.02MI MP 0.00-0.01 PH1 | 2H1 | 7/1/2014 | - | - | - | 102,000 | **102,000** | WP 3-257 | WP 3-658 |
| 83 | 30842132 | 23739 | DFM-0205-01 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 65,000 | **65,000** | WP 3-260 | WP 3-659 |
| 84 | 30842128 | 23693 | DFM-0223-03 REPL 0.07MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 131,000 | **131,000** | WP 3-263 | WP 3-660 |
| 85 | 30842163 | 23781 | DFM-0401-10 REPL 0.01MI MP 0.00-0.01 PH1 | 2H1 | 7/1/2014 | - | - | - | 80,000 | **80,000** | WP 3-266 | WP 3-661 |
| 86 | 30841720 | 23759 | DFM-0403-10 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 57,000 | **57,000** | WP 3-269 | WP 3-662 |
| 87 | 30842168 | 23849 | DFM-0404-11 REPL 0.04MI MP 0.00-0.04 PH1 | 2H1 | 7/1/2013 | - | - | 230,000 | - | **230,000** | WP 3-272 | WP 3-663 |
| 88 | 30842175 | 23786 | DFM-0405-01 REPL 8.74MI MP 2.04-12.36 PH1 | 2H1 | 12/1/2013 | - | 3,571,000 | 32,100,000 | - | **35,671,000** | WP 3-275 | WP 3-664 |
| 89 | 30842129 | 23729 | DFM-0405-16 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 57,000 | **57,000** | WP 3-279 | WP 3-665 |
| 90 | 30842176 | 23811 | DFM-0603-01 REPL 0.58MI MP 0.00-0.57 PH1 | 2H1 | 12/1/2013 | - | 183,000 | 1,528,000 | - | **1,711,000** | WP 3-282 | WP 3-666 |
| 91 | 30843921 | 24085 | DFM-0604-06 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | 1,242 | - | - | 55,758 | **57,000** | WP 3-286 | WP 3-667 |
| 92 | 30842189 | 23780 | DFM-0604-16 REPL 0.50MI MP 0.00-0.500 PH1 | 2H1 | 12/1/2013 | - | 113,000 | 1,021,000 | - | **1,134,000** | WP 3-289 | WP 3-668 |
| 93 | 30842196 | 23760 | DFM-0611-08 REPL 0.06MI MP 0.00-0.06 PH1 | 2H1 | 7/1/2013 | 446 | - | 336,554 | - | **337,000** | WP 3-292 | WP 3-669 |
| 94 | 30842203 | 23725 | DFM-0614-10 REPL 0.09MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | 1,312 | - | - | 511,688 | **513,000** | WP 3-295 | WP 3-670 |
| 95 | 30842238 | 23707 | DFM-0617-06 REPL 0.01MI MP 10.63-10.64 PH1 | 2H1 | 7/1/2014 | - | - | - | 110,000 | **110,000** | WP 3-298 | WP 3-671 |
| 96 | 30842194 | 23716 | DFM-0619-05 REPL 0.08MI MP 1.29-1.38 PH1 | 2H1 | 7/1/2014 | - | - | - | 731,000 | **731,000** | WP 3-301 | WP 3-672 |
| 97 | 30842177 | 23930 | DFM-0627-01 REPL 0.02MI MP 0.00-0.02 PH1 | 2H1 | 7/1/2013 | - | - | 189,000 | - | **189,000** | WP 3-304 | WP 3-673 |
| 98 | 30842199 | 23855 | DFM-0630-01 REPL 0.14MI MP 0.00-10.55 PH1 | 2H1 | 12/1/2014 | - | - | 29,000 | 265,000 | **294,000** | WP 3-307 | WP 3-674 |
| 99 | 30865351 | 24882 | DFM-0630-06 REPL 0.10MI MP 0.00-0.10 PH1 | 2H1 | 12/1/2014 | - | - | 36,000 | 320,000 | **356,000** | WP 3-310 | WP 3-675 |
| 100 | 30865352 | 24883 | DFM-0804-01 REPL 0.01MI MP 0.21-1.16 PH1 | 2H1 | 7/1/2012 | - | 84,000 | - | - | **84,000** | WP 3-313 | WP 3-676 |
| 101 | 30865353 | 24884 | DFM-0804-03 REPL 0.02MI MP 0.00-0.02 PH1 | 2H1 | 7/1/2014 | - | - | - | 135,000 | **135,000** | WP 3-316 | WP 3-677 |
| 102 | 30843917 | 24081 | DFM-0809-01 REPL 0.03MI MP 0.00-0.03 PH1 | 2H1 | 7/1/2014 | - | - | - | 158,000 | **158,000** | WP 3-319 | WP 3-678 |
| 103 | 30842204 | 23722 | DFM-0810-01 REPL 0.03MI MP 0.00-0.03 PH1 | 2H1 | 7/1/2014 | - | - | - | 80,000 | **80,000** | WP 3-322 | WP 3-679 |
| 104 | 30865355 | 24885 | DFM-0837-01 REPL 0.03MI MP 1.52-1.54 PH1 | 2H1 | 7/1/2014 | - | - | - | 133,000 | **133,000** | WP 3-325 | WP 3-680 |
| 105 | 30865356 | 24886 | DFM-1013-02 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 62,000 | **62,000** | WP 3-328 | WP 3-681 |
| 106 | 30865357 | 24887 | DFM-1017-01 REPL 0.01MI MP 0.01-0.01 PH1 | 2H1 | 7/1/2013 | - | - | 72,000 | - | **72,000** | WP 3-331 | WP 3-682 |
| 107 | 30842178 | 23807 | DFM-1020-01 REPL 2.69MI MP 0.00-2.69 PH1 | 2H1 | 12/1/2014 | 25,000 | - | 797,000 | 7,146,000 | **7,968,000** | WP 3-334 | WP 3-683 |
| 108 | 30842179 | 23810 | DFM-1024-02 REPL 0.02MI MP 0.00-0.02 PH1 | 2H1 | 7/1/2014 | - | - | - | 108,000 | **108,000** | WP 3-337 | WP 3-684 |
| 109 | 30841611 | 23686 | DFM-1202-12 REPL 0.01MI MP 1.91-1.92 PH1 | 2H1 | 7/1/2013 | - | - | 76,000 | - | **76,000** | WP 3-340 | WP 3-685 |
| 110 | 30842181 | 23685 | DFM-1202-15 REPL 0.02MI MP 0.00-0.02 PH1 | 2H1 | 7/1/2012 | - | 101,000 | - | - | **101,000** | WP 3-343 | WP 3-686 |
| 111 | 30842127 | 23711 | DFM-1202-16 REPL 0.08MI MP 0.00-0.08 PH1 | 2H1 | 7/1/2013 | - | - | 342,000 | - | **342,000** | WP 3-346 | WP 3-687 |
| 112 | 30842182 | 23828 | DFM-1209-01 REPL 0.34MI MP 4.29-4.64 PH1 | 2H1 | 12/1/2014 | - | - | 116,000 | 1,044,000 | **1,160,000** | WP 3-349 | WP 3-688 |
| 113 | 30842221 | 23717 | DFM-1209-05 REPL 0.03MI MP 4.99-5.02 PH1 | 2H1 | 7/1/2014 | 1,360 | - | - | 222,640 | **224,000** | WP 3-352 | WP 3-689 |
| 114 | 30842183 | 23821 | DFM-1213-01 REPL 0.26MI MP 0.55-3.51 PH1 | 2H1 | 7/1/2014 | - | - | - | 632,000 | **632,000** | WP 3-355 | WP 3-690 |
| 115 | 30842220 | 23726 | DFM-1220-01 REPL 0.01MI MP 0.86-0.87 PH1 | 2H1 | 7/1/2013 | - | - | 63,000 | - | **63,000** | WP 3-358 | WP 3-691 |
| 116 | 30865358 | 24888 | DFM-1302-01 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2013 | - | - | 133,000 | - | **133,000** | WP 3-361 | WP 3-692 |
| 117 | 30842172 | 23830 | DFM-1302-02 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2013 | - | - | 82,000 | - | **82,000** | WP 3-364 | WP 3-693 |
| 118 | 30842185 | 23802 | DFM-1306-01 REPL 0.04MI MP 1.48-4.19 PH1 | 2H1 | 7/1/2013 | - | - | 325,000 | - | **325,000** | WP 3-367 | WP 3-694 |
| 119 | 30865359 | 24889 | DFM-1306-06 REPL 0.02MI MP 0.00-0.01 PH1 | 2H1 | 7/1/2013 | - | - | 179,000 | - | **179,000** | WP 3-370 | WP 3-695 |
| 120 | 30842186 | 23805 | DFM-1307-06 REPL 0.03MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2014 | - | - | - | 160,000 | **160,000** | WP 3-373 | WP 3-696 |



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Table 2
Capital Expenditures by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 121 | 30842222 | 23751 | DFM-1406-01 REPL 0.01MI MP 0.00-0.01 PH1 | 2H1 | 7/1/2013 | - | - | 67,000 | - | **67,000** | WP 3-376 | WP 3-697 |
| 122 | 30842187 | 23862 | DFM-1502-08 REPL 0.53MI MP 0.00-0.52 PH1 | 2H1 | 12/1/2014 | - | - | 271,000 | 2,437,000 | **2,708,000** | WP 3-379 | WP 3-698 |
| 123 | 30842188 | 23875 | DFM-1503-01 REPL 0.93MI MP 0.00-0.92 PH1 | 2H1 | 12/1/2014 | - | - | 325,000 | 2,923,000 | **3,248,000** | WP 3-382 | WP 3-699 |
| 124 | 30842190 | 23783 | DFM-1509-01 REPL 0.33MI MP 0.00-0.33 PH1 | 2H1 | 12/1/2014 | - | - | 63,000 | 470,000 | **533,000** | WP 3-385 | WP 3-700 |
| 125 | 30842249 | 23778 | DFM-1509-04 REPL 0.01MI MP 0.78-0.78 PH1 | 2H1 | 7/1/2012 | - | 51,000 | - | - | **51,000** | WP 3-388 | WP 3-701 |
| 126 | 30842192 | 23733 | DFM-1603-03 REPL 0.01MI MP 0.48-0.49 PH1 | 2H1 | 7/1/2014 | - | - | - | 96,000 | **96,000** | WP 3-391 | WP 3-702 |
| 127 | 30865380 | 24890 | DFM-1607-01 REPL 1.62MI MP 0.00-1.62 PH1 | 2H1 | 12/1/2014 | - | - | 873,000 | 7,858,000 | **8,731,000** | WP 3-394 | WP 3-703 |
| 128 | 30842193 | 23697 | DFM-1614-08 REPL 0.44MI MP 0.56-1.00 PH1 | 2H1 | 12/1/2014 | - | - | 165,000 | 1,487,000 | **1,652,000** | WP 3-397 | WP 3-704 |
| 129 | 30842191 | 23827 | DFM-1615-07 REPL 0.01MI MP 0.00-0.01 PH1 | 2H1 | 7/1/2013 | - | - | 77,000 | - | **77,000** | WP 3-400 | WP 3-705 |
| 130 | 30842195 | 23682 | DFM-1617-01 REPL 0.44MI MP 0.82-1.26 PH1 | 2H1 | 12/1/2014 | - | - | 165,000 | 1,484,000 | **1,649,000** | WP 3-403 | WP 3-706 |
| 131 | 30865381 | 24891 | DFM-1805-01 REPL 0.03MI MP 0.00-0.03 PH1 | 2H1 | 7/1/2013 | - | - | 98,000 | - | **98,000** | WP 3-406 | WP 3-707 |
| 132 | 30841468 | 23762 | DFM-1813-02 REPL 0.07MI MP 1.00-16.40 PH1 | 2H1 | 7/1/2012 | - | 161,000 | - | - | **161,000** | WP 3-409 | WP 3-708 |
| 133 | 30842241 | 23684 | DFM-1813-06 REPL 0.02MI MP 0.00-0.02 PH1 | 2H1 | 7/1/2014 | - | - | - | 85,000 | **85,000** | WP 3-412 | WP 3-709 |
| 134 | 30842226 | 23769 | DFM-1815-02 REPL 0.72MI MP 18.76-19.48 PH1 | 2H1 | 12/1/2014 | - | - | 326,000 | 2,938,000 | **3,264,000** | WP 3-415 | WP 3-710 |
| 135 | 30842184 | 23801 | DFM-1815-15 REPL 0.01MI MP 1.38-1.39 PH1 | 2H1 | 7/1/2013 | - | - | 74,000 | - | **74,000** | WP 3-418 | WP 3-711 |
| 136 | 30842138 | 23784 | DFM-1816-20 REPL 0.01MI MP 0.00-0.01 PH1 | 2H1 | 7/1/2014 | - | - | - | 89,000 | **89,000** | WP 3-421 | WP 3-712 |
| 137 | 30842197 | 23761 | DFM-1817-01 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2013 | - | - | 74,000 | - | **74,000** | WP 3-424 | WP 3-713 |
| 138 | 30842198 | 23766 | DFM-1818-01 REPL 0.13MI MP 0.00-0.60 PH1 | 2H1 | 12/1/2014 | - | - | - | 276,000 | **276,000** | WP 3-427 | WP 3-714 |
| 139 | 30865382 | 24892 | DFM-1880-08 REPL 0.02MI MP 0.00-0.02 PH1 | 2H1 | 7/1/2014 | - | - | - | 132,000 | **132,000** | WP 3-430 | WP 3-715 |
| 140 | 30841609 | 23806 | DFM-2410-01 REPL 0.02MI MP 0.00-0.03 PH1 | 2H1 | 7/1/2014 | - | - | - | 94,000 | **94,000** | WP 3-433 | WP 3-716 |
| 141 | 30865383 | 24893 | DFM-2412-01 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2013 | - | - | 52,000 | - | **52,000** | WP 3-436 | WP 3-717 |
| 142 | 30865384 | 24894 | DFM-3002-01 REPL 0.02MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2013 | - | - | 100,000 | - | **100,000** | WP 3-439 | WP 3-718 |
| 143 | 30865385 | 24895 | DFM-3008-01 REPL 0.03MI MP 7.99-8.02 PH1 | 2H1 | 7/1/2013 | - | - | 182,000 | - | **182,000** | WP 3-442 | WP 3-719 |
| 144 | 30841615 | 23699 | DFM-3022-01 REPL 0.01MI MP 0.00-0.00 PH1 | 2H1 | 7/1/2013 | - | - | 51,000 | - | **51,000** | WP 3-445 | WP 3-720 |
| 145 | 30842200 | 23695 | DFM-7219-01 REPL 3.73MI MP 0.00-3.73 PH1 | 2H1 | 12/1/2014 | - | - | 952,000 | 8,569,000 | **9,521,000** | WP 3-449 | WP 3-721 |
| 146 | 30842137 | 23763 | DFM-7220-01 REPL 0.02MI MP 15.71-15.74 PH1 | 2H1 | 7/1/2014 | - | - | - | 87,000 | **87,000** | WP 3-452 | WP 3-722 |
| 147 | 30842201 | 23720 | DFM-7221-10 REPL 0.14MI MP 15.99-16.13 PH1 | 2H1 | 12/1/2012 | 540 | 488,460 | - | - | **489,000** | WP 3-455 | WP 3-723 |
| 148 | 30841616 | 23710 | DFM-7221-15 REPL 1.34MI MP 0.04-1.51 PH1 | 2H1 | 12/1/2012 | 713,000 | 6,413,000 | - | - | **7,126,000** | WP 3-458 | WP 3-724 |
| 149 | 30842202 | 23701 | DFM-7225-02 REPL 2.15MI MP 0.00-2.42 PH1 | 2H1 | 12/1/2014 | - | - | 1,149,000 | 10,340,000 | **11,489,000** | WP 3-461 | WP 3-725 |
| 150 | 30841614 | 23617 | DFM-7226-02 REPL 1.37MI MP 0.35-3.26 PH1 | 2H1 | 12/1/2012 | 406,000 | 3,656,000 | - | - | **4,062,000** | WP 3-464 | WP 3-726 |
| 151 | 30865386 | 24896 | DFM-8832-01 REPL 0.02MI MP 0.00-0.01 PH1 | 2H1 | 7/1/2013 | - | - | 79,000 | - | **79,000** | WP 3-467 | WP 3-727 |
| 152 | 30842139 | 23750 | TAPS-REPL CC PH1 | 2H1 | 12/1/2014 | - | - | 1,682,000 | 14,676,000 | **16,358,000** | WP 3-470 | WP 3-728 |
| 153 | 30842135 | 23753 | TAPS-REPL DA PH1 | 2H1 | 12/1/2014 | - | - | 710,000 | 6,326,000 | **7,036,000** | WP 3-476 | WP 3-729 |
| 154 | 30841617 | 23741 | TAPS-REPL DI PH1 | 2H1 | 12/1/2014 | - | - | 661,000 | 5,872,000 | **6,533,000** | WP 3-481 | WP 3-730 |
| 155 | 30842136 | 23757 | TAPS-REPL EB PH1 | 2H1 | 7/1/2014 | - | - | - | 458,000 | **458,000** | WP 3-486 | WP 3-731 |
| 156 | 30842123 | 23690 | TAPS-REPL FR PH1 | 2H1 | 12/1/2014 | - | - | 593,000 | 5,335,000 | **5,928,000** | WP 3-490 | WP 3-732 |
| 157 | 30842165 | 23794 | TAPS-REPL HB PH1 | 2H1 | 12/1/2014 | - | - | 561,000 | 5,052,000 | **5,613,000** | WP 3-495 | WP 3-733 |
| 158 | 30841139 | 23616 | TAPS-REPL KE PH1 | 2H1 | 12/1/2014 | - | - | 737,000 | 6,392,000 | **7,129,000** | WP 3-499 | WP 3-734 |
| 159 | 30842173 | 23923 | TAPS-REPL LP PH1 | 2H1 | 7/1/2014 | - | - | - | 304,000 | **304,000** | WP 3-504 | WP 3-735 |
| 160 | 30842205 | 23749 | TAPS-REPL MI PH1 | 2H1 | 12/1/2014 | - | - | 1,053,000 | 9,359,000 | **10,412,000** | WP 3-507 | WP 3-736 |



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Pacific Gas and Electric Company
Implementation Plan
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UPDATED 11/04/11

Table 2
Capital Expenditures by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | 30842124 | 23718 | TAPS-REPL NB PH1 | 2H1 | 12/1/2014 | - | - | 246,000 | 2,165,000 | **2,411,000** | WP 3-509 | WP 3-737 |
| 162 | 30842162 | 23776 | TAPS-REPL NV PH1 | 2H1 | 12/1/2014 | - | - | 1,024,000 | 9,063,000 | **10,087,000** | WP 3-514 | WP 3-738 |
| 163 | 30842133 | 23740 | TAPS-REPL PN PH1 | 2H1 | 12/1/2014 | - | - | 1,128,000 | 10,087,000 | **11,215,000** | WP 3-518 | WP 3-739 |
| 164 | 30842174 | 23928 | TAPS-REPL SA PH1 | 2H1 | 12/1/2014 | - | - | 1,490,000 | 11,621,000 | **13,111,000** | WP 3-524 | WP 3-740 |
| 165 | 30842166 | 23817 | TAPS-REPL SF PH1 | 2H1 | 12/1/2014 | - | - | 257,000 | 2,309,000 | **2,566,000** | WP 3-530 | WP 3-741 |
| 166 | 30842169 | 23787 | TAPS-REPL SI PH1 | 2H1 | 12/1/2014 | - | - | 497,000 | 2,974,000 | **3,471,000** | WP 3-533 | WP 3-742 |
| 167 | 30842126 | 23689 | TAPS-REPL SJ PH1 | 2H1 | 12/1/2014 | - | - | 847,000 | 7,606,000 | **8,453,000** | WP 3-538 | WP 3-743 |
| 168 | 30842134 | 23744 | TAPS-REPL SO PH1 | 2H1 | 12/1/2014 | - | - | 139,000 | 1,251,000 | **1,390,000** | WP 3-543 | WP 3-744 |
| 169 | 30841474 | 23706 | TAPS-REPL ST PH1 | 2H1 | 12/1/2014 | - | - | 1,878,000 | 16,824,000 | **18,702,000** | WP 3-546 | WP 3-745 |
| 170 | 30842160 | 23785 | TAPS-REPL YO PH1 | 2H1 | 12/1/2014 | - | - | 1,562,000 | 13,017,000 | **14,579,000** | WP 3-551 | WP 3-746 |
| 171 | | | **Total MAT 2H1 - Imp Plan Pipe Replacement** | | | **15,489,675** | **197,960,965** | **280,150,277** | **339,962,087** | **833,563,004** | | |
| 172 | | | | | | | | | | | | |
| 173 | 30843926 | 24030 | Emergency Pipe Replacement | 2H2 | 12/31/2014 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | **8,000,000** | WP 3-557 | n/a |
| 174 | 30846247 | 24158 | Strength Test-Capital Valves and Testheads | 2H2 | 12/31/2014 | 6,700,000 | 3,700,000 | 3,800,000 | 3,900,000 | **18,100,000** | WP 3-558 | n/a |
| 175 | 30866501 | 25002 | Post StrengthTest Emergency Replacements | 2H2 | 12/31/2014 | 7,500,000 | 10,000,000 | 10,000,000 | 10,000,000 | **37,500,000** | WP 3-559 | n/a |
| 176 | | | **Total MAT 2H2 - Imp Plan Emergency Pipe Repl** | | | **16,200,000** | **15,700,000** | **15,800,000** | **15,900,000** | **63,599,999** | | |
| 177 | | | | | | | | | | | | |
| 178 | 30847124 | 24009 | L-131 MP 50.5-57.4 UPGRADE PH-1 | 2H4 | 11/1/2012 | 150,000 | 1,500,000 | 357,000 | - | **2,007,000** | WP 3-560 | WP 3-747 |
| 179 | 30846928 | 24025 | L-132 MP 31.7-38.4 UPGRADE PH-1 | 2H4 | 11/1/2012 | 75,000 | 1,500,000 | 462,000 | - | **2,037,000** | WP 3-563 | WP 3-748 |
| 180 | 30846926 | 24023 | L-300A MP 299-352 UPGRADE PH-1 | 2H4 | 11/1/2013 | 150,000 | 1,000,000 | 6,935,000 | - | **8,085,000** | WP 3-566 | WP 3-749 |
| 181 | 30846925 | 24021 | L-300A MP 352.3-391.2 UPGRADE PH-1 | 2H4 | 11/1/2012 | 300,000 | 4,534,000 | - | - | **4,834,000** | WP 3-570 | WP 3-750 |
| 182 | 30846924 | 24017 | L-300B MP 299.0-351.8 UPGRADE PH-1 | 2H4 | 11/1/2013 | 150,000 | 1,000,000 | 6,845,000 | - | **7,995,000** | WP 3-573 | WP 3-751 |
| 183 | 30846923 | 24012 | L-300B MP 351.8-390.9 UPGRADE PH-1 | 2H4 | 11/1/2012 | 300,000 | 5,101,000 | - | - | **5,401,000** | WP 3-576 | WP 3-752 |
| 184 | | | **Total MAT 2H4 - Imp Plan ILI Pipeline Retrofit** | | | **1,125,000** | **14,635,000** | **14,599,000** | **-** | **30,359,000** | | |
| 185 | | | | | | | | | | | | |
| 186 | | | **Total Pipeline Modernization Capital Projects** | | | **32,814,675** | **228,904,965** | **310,549,277** | **355,862,087** | **928,131,004** | | |



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**Pacific Gas and Electric Company**
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## PROJECT SUMMARY

Reference: WP 3-2, Table 2, Line 20

| | |
|---|---|
| TITLE: | L-108_2 REPL 2.58MI MP 48.18-50.69 PH1 |
| ORDER NO: | 30842211 |
| PSRS NO. | 23815 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 12/01/14 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **25** | **0** | **1,016** | **9,116** |

**DESCRIPTION:** Replace 2.58 miles of pipeline L-108 between MP 48.18 and 50.69. The total number of segments to be replaced is 18.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 0 | 0 | 13,601 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 11,439 | 800 | 1,362 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength- tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 92 feet of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats, located within a Class Location 2-4 or HCA.

In addition, 17 segment(s) totaling 13,509 feet of pipe that has a documented strength test is included in this project for construction efficiency.



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**Pacific Gas and Electric Company**
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## PROJECT SUMMARY

Reference: WP 3-2, Table 2, Line 33

| | |
|---|---|
| TITLE: | L-119B REPL 0.29MI MP 8.96-9.22 PH1 |
| ORDER NO: | 30842164 |
| PSRS NO. | 23791 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 12/01/13 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **104** | **939** | **0** |

**DESCRIPTION:** Replace 0.29 miles of pipeline L-119B between MP 8.96 and MP 9.22. The total number of segments to be replaced is 3.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 1,518 | 0 | 0 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 0 | 1,518 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength- tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 158 feet of pipe install ed prior to 1970 operating above 3 0% SMYS with the potential for pipe manufacturing threats, located within a Class Location 2-4 or HCA.
- 2 segment(s) totaling 1,360 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.



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**Pacific Gas and Electric Company**
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## PROJECT SUMMARY

Reference: WP 3-2, Table 2, Line 35

TITLE: L-123 REPL 4.16MI MP 0.00-7.51 PH1
ORDER NO: 30842218
PSRS NO. 23822
MAT CODE: 2H1
OPERATIVE DATE: 12/01/14
AFUDC ELIGIBLE: YES

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **25** | **0** | **1,005** | **9,023** |

**DESCRIPTION:** Replace 4.16 miles of pipeline L-123 between MP 0.00 and MP 7.51. The total number of segments to be replaced is 24.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 21,968 | 0 | 0 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 14,749 | 6,415 | 804 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength- tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 2 segment(s) totaling 3,534 feet of pipe installed prior to 1970 operating above 30 % SMYS with the potential for pipe manufacturing threats, located within a Class Location 2-4 or HCA.
- 18 segment(s) totaling 18,214 feet of pipe installed prior to 1960 operating above 30% SMYS with the potential for pipe fabrication threats and located within a Class Location 2-4 or HCA.
- 1 segment(s) totaling 200 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 3 segment(s) totaling 20 feet of pipe that has a documented strength test is included in this project for construction efficiency.



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**Pacific Gas and Electric Company**
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## PROJECT SUMMARY

Reference: WP 3-2, Table 2, Line 39

TITLE: L-131_1 REPL 1.69MI MP 32.38-35.87 PH1
ORDER NO: 30841473
PSRS NO. 23694
MAT CODE: 2H1
OPERATIVE DATE: 12/1/2012
AFUDC ELIGIBLE: YES

### ESCALATED FINANCIAL EXPENDITURES (Capital)
### ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **1,198** | **10,485** | **0** | **0** |

**DESCRIPTION:** Replace 1.69 miles of pipeline L-131 between MP 32.38 and MP 35.87. The total number of segments to be replaced is 9.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 0 | 0 | 8,926 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 750 | 1,112 | 7,064 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 826 feet of pipe installed prior to 1960 operating above 30% SMYS with the potential for pipe fabrication threats and located within a Class Location 2-4 or HCA.
- 1 segment(s) totaling 209 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 1 segment(s) totaling 9 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.



SB_GT&S_0675580

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## PROJECT SUMMARY

Reference: WP 3-2, Table 2, Line 40

| | |
|---|---|
| TITLE: | L-131_2 REPL 0.29MI MP 8.15-8.44 PH1 |
| ORDER NO: | 30841475 |
| PSRS NO. | 23746 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 12/1/2012 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **135** | **1,212** | **0** | **0** |

**DESCRIPTION:** Replace 0.29 miles of pipeline L-131 between MP 8.15 and MP 8.44. The total number of segments to be replaced is 3.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 1,511 | 0 | 0 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 0 | 0 | 1,511 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 2 segment(s) totaling 1,468 feet of pipe installed prior to 1960 operating above 30% SMYS with the potential for pipe fabrication threats and located within a Class Location 2-4 or HCA.
- 1 segment(s) totaling 43 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.



SB_GT&S_0675581

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## PROJECT SUMMARY

Reference: WP 3-3, Table 2, Line 64

| | |
|---|---|
| TITLE: | L-191 REPL 1.97MI MP 0.07-6.47 PH1 |
| ORDER NO: | 30841618 |
| PSRS NO. | 23748 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 12/1/2013 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital)
## ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **25** | **2,049** | **18,171** | **0** |

**DESCRIPTION:** Replace1.97miles of pipeline L-191 between MP 0.07 and MP 6.47. The total number of segments to be replaced is 9.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 0 | 0 | 10,167 | 226 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 59 | 100 | 10,234 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 6 segment(s) totaling 10,262 feet of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats, located within a Class Location 2-4 or HCA.
- 3 segment(s) totaling 131 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.

Included in this project is 126 feet of pipe that was installed after 1970, and PG&E has not been able to confirm complete strength test documentation. The cost to replace the post-1970 pipe is forecasted to be $248,000 and is NOT included in the cost forecast for this project. The costs associated with replacing post-70 pipe without a verified strength test will be charged to a separate order for which incremental cost recovery is not being requested.



SB_GT&S_0675582

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## PROJECT SUMMARY

Reference: WP 3-3, Table 2, Line 68

| | |
|---|---|
| TITLE: | L-210A REPL 2.10MI MP 19.69-25.62 PH1 |
| ORDER NO: | 30842237 |
| PSRS NO. | 23698 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 12/1/2012 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital)
## ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **778** | **6,998** | **0** | **0** |

**DESCRIPTION:** Replace 2.10 miles of pipeline L-210A between MP 19.69 and MP 25.62. The total number of segments to be replaced is 14.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 0 | 0 | 11,100 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 7,904 | 3,196 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 7 segment(s) totaling 5,428 feet of pipe installed prior to 1960 operating above 30% SMYS with the potential for pipe fabrication threats and located within a Class Location 2-4 or HCA.
- 3 segment(s) totaling 5,620 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 4 segment(s) totaling 52 feet of pipe that has a documented strength test is included in this project for construction efficiency.



SB_GT&S_0675583

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## PROJECT SUMMARY

Reference: WP 3-4, Table 2, Line 88

TITLE: DFM-0405-01 REPL 8.74MI MP 2.04–12.36 PH1
ORDER NO: 30842175
PSRS NO. 23786
MAT CODE: 2H1
OPERATIVE DATE: 12/1/2013
AFUDC ELIGIBLE: YES

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **3,571** | **32,100** | **0** |

**DESCRIPTION:** Replace 8.74 miles of pipeline DFM-0405-01 between MP 2.04 and MP 12.36. The total number of segments to be replaced is 36.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 46,129 | 0 | 0 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 4,905 | 13,946 | 27,278 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 25 segment(s) totaling 33,486 feet of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats, located within a Class Location 2-4 or HCA.
- 7 segment(s) totaling 10,583 feet of pipe installed prior to 1970 operating below 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.



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## PROJECT SUMMARY

Reference: WP 3-4, Table 2, Line 95

| | |
|---|---|
| TITLE: | DFM-0617-06 REPL 0.01 MI MP 10.63–10.64 PH1 |
| ORDER NO: | 30842238 |
| PSRS NO. | 23707 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 7/1/2014 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **0** | **0** | **110** |

**DESCRIPTION:** Replace 34 feet of pipeline DFM-0617-06 between MP 10.63 and MP 10.64. The total number of segments to be replaced is 1.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 34 | 0 | 0 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 0 | 0 | 34 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 34 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.



SB_GT&S_0675585

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## PROJECT SUMMARY

Reference: WP 3-4, Table 2, Line 109

| | |
|---|---|
| TITLE: | DFM-1202-12 REPL 0.01MI MP 1.91–1.92 PH1 |
| ORDER NO: | 30841611 |
| PSRS NO. | 23686 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 7/1/2013 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **0** | **76** | **0** |

**DESCRIPTION:** Replace 48 feet of pipeline DFM-1202-12 between MP 1.91 and MP 1.92. The total number of segments to be replaced is 1.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 48 | 0 | 0 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 0 | 48 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 48 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.



SB_GT&S_0675586

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## PROJECT SUMMARY

Reference: WP 3-4, Table 3-2, Line 115

| | |
|---|---|
| TITLE: | DFM-1220-01 REPL 0.01MI MP 0.86–0.87 PH1 |
| ORDER NO: | 30842220 |
| PSRS NO. | 23726 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 7/1/2013 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **0** | **63** | **0** |

**DESCRIPTION:** Replace 41 feet of pipeline DFM-1220-01 between MP 0.86 and MP 0.87. The total number of segments to be replaced is 1.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 41 | 0 | 0 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 41 | 0 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 41 feet of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats, located within a Class Location 2-4 or HCA.



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## PROJECT SUMMARY

Reference: WP 3-5, Table 2, Line 147

| | |
|---|---|
| TITLE: | DFM-7221-10 REPL 0.14MI MP 15.99-16.13 PH1 |
| ORDER NO: | 30842201 |
| PSRS NO. | 23720 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 12/1/2012 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **1** | **488** | **0** | **0** |

**DESCRIPTION:** Replace 0.14miles of pipeline DFM-7221-10 between MP 15.99 and MP 16.13. The total number of segments to be replaced is 1.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 754 | 0 | 0 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 0 | 754 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 754 feet of pipe installed prior to 1960 operating above 30% SMYS with the potential for pipe fabrication threats and located within a Class Location 2-4 or HCA.



SB_GT&S_0675588

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## PROJECT SUMMARY

Reference: WP 3-5, Table 2, Line 150

| | |
|---|---|
| TITLE: | DFM-7226-02 REPL 1.37MI MP 0.35-3.26 PH1 |
| ORDER NO: | 30841614 |
| PSRS NO. | 23617 |
| MAT CODE: | 2H1 |
| OPERATIVE DATE: | 12/1/2012 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **406** | **3,656** | **0** | **0** |

**DESCRIPTION:** Replace 1.37miles of pipeline DFM-7226-02 between MP 0.35 and MP 3.26. The total number of segments to be replaced is 4.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 7,231 | 0 | 0 | 0 |

Footage per area classification

| Non-Congested | Semi-Congested | Highly-Congested |
|---|---|---|
| 0 | 7,231 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength-tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 4 segment(s) totaling 7,231 feet of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats, located within a Class Location 2-4 or HCA.



SB_GT&S_0675589

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## CAPITAL PROJECT SUMMARY

Reference: WP 3-6, Table 2, Line 179

| | |
|---|---|
| TITLE: | L-132 MP 31.7-38.4 Upgrade PH1 |
| ORDER NO: | 30846928 |
| PSRS NO. | 24025 |
| MAT Code: | 2H4 |
| OPERATIVE DATE: | 11/1/2012 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | 75 | 1,500 | 462 | 0 |

## DESCRIPTION

This project will consist of upgrading 7.48 miles of 2 4-36 inch, Line-132, pipeline between MP 31.7 and MP 38.4. The goal of the upgrade is to ensure an in-line inspection tool (commonly referred to as a Smart Pig) can successfully pass through the pipeline and collect data in order for PG&E to verify the integrity of this pipeline. The project will require the replacement of approximately (0) mainline valve assemblies along with miscellaneous fittings, and the installation of two (2) launcher and receiver facilities.

## JUSTIFICATION

The work is being performed to be able to use in-line inspection (ILI) methods on the pipeline, which provides critical backbone gas transportation to the Bay Area. The pipeline is 1948-1995 vintages, with 2.86 miles of pipe located in High Consequence Areas (HCAs). Information gained from the ILI tools will identify any critical and sub-critical pipeline anomalies. ILI data is valuable input into the Engineering Condition Assessment process PG &E will use to identify and mitigate ground movement threats, and to identify and remove excessive pups, miter bend and wrinkle bends.



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## CAPITAL PROJECT SUMMARY

Reference: WP 3-6, Table 2, Line 181

| | |
|---|---|
| TITLE: | L-300A MP 352.3-391.2 Upgrade PH1 |
| ORDER NO: | 30846925 |
| PSRS NO. | 24021 |
| MAT Code: | 2H4 |
| OPERATIVE DATE: | 11/1/2012 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital)
## ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | 300 | 4,534 | 0 | 0 |

## DESCRIPTION

This project will consist of upgrading 38.96 miles of 34-36 inch, Line-300A, pipeline between MP 352.3 and MP 391.2. The goal of the upgrade is to ensure an in-line inspection tool (commonly referred to as a Smart Pig) can successfully pass through the pipeline and collect data in order for PG&E to verify the integrity of this pipeline. The project will require the replacement of approximately two (2) mainline valve assemblies along with miscellaneous fittings, and the installation of two (2) launcher and receiver facilities.

## JUSTIFICATION

The work is being performed to be able to use in-line inspection (ILI) methods on the pipeline, which provides critical backbone gas transportation to the Bay Area. The pipeline is 1950-1997 vintages, paralleling I-5 with 2.63 miles of pipe located in High Consequence Areas (HCAs). Information gained from the ILI tools will identify any critical and sub-critical pipeline anomalies. ILI data is valuable input into the Engineering Condition Assessment process PG&E will use to identify and mitigate ground movement threats, and to identify and remove excessive pups, miter bend and wrinkle bends.



SB_GT&S_0675591

**Pacific Gas and Electric Company**
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## CAPITAL PROJECT SUMMARY

Reference: WP 3-6, Table 2, Line 182

| | |
|---|---|
| TITLE: | L-300B MP 299.0-351.8 Upgrade PH1 |
| ORDER NO: | 30846924 |
| PSRS NO. | 24017 |
| MAT Code: | 2H4 |
| OPERATIVE DATE: | 11/1/2013 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | 150 | 1,000 | 6,845 | 0 |

## DESCRIPTION

This project will consist of upgrading 52.74 miles of 34 inch, Line-300B, pipeline between MP 299.0 and MP 351.8. The goal of the upgrade is to ensure an in-line inspection tool (commonly referred to as a Smart Pig) can successfully pass through the pipeline and collect data in order for PG&E to verify the integrity of this pipeline. The project will require the replacement of approximately six (6) mainline valve assemblies along with miscellaneous fittings, and the installation of two (2) launcher and receiver facilities.

## JUSTIFICATION

The work is being performed to be able to use in-line inspection (ILI) methods on the pipeline, which provides critical backbone gas transportation to the Bay Area. The pipeline is 1950-1971 vintage, paralleling I-5. Information gained from the ILI tools will identify any critical and sub-critical pipeline anomalies. ILI data is valuable input into the Engineering Condition Assessment process PG&E will use to identify and mitigate ground movement threats, and to identify and remove excessive pups, miter bend and wrinkle bends.



SB_GT&S_0675592

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## CAPITAL PROJECT SUMMARY

Reference: WP 3-6, Table 2, Line 183

| | |
|---|---|
| TITLE: | L-300B MP 351.8-390.9 Upgrade PH1 |
| ORDER NO: | 30846923 |
| PSRS NO. | 24012 |
| MAT Code: | 2H4 |
| OPERATIVE DATE: | 11/1/2012 |
| AFUDC ELIGIBLE: | YES |

## ESCALATED FINANCIAL EXPENDITURES (Capital) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | 300 | 5,101 | 0 | 0 |

## DESCRIPTION

This project will consist of upgrading 39.38 miles of 24-34 inch, Line-300B, pipeline between MP 351.8 and MP 390.9. The goal of the upgrade is to ensure an in-line inspection tool (commonly referred to as a Smart Pig) can successfully pass through the pipeline and collect data in order for PG&E to verify the integrity of this pipeline. The project will require the replacement of approximatelytwo (2) mainlinevalve assemblies along with miscellaneous fittings, and the installation of three (3) launcher and receiver facilities.

## JUSTIFICATION

The work is being performed to be able to use in-line inspection (ILI) methods on the pipeline, which provides critical backbone gas transportation to the Bay Area. The pipeline is 1950 Vintage, paralleling I-5 with 1.34 miles of pipe located in a High Consequence Areas (HCAs). Information gained from the ILI tools will identify any critical and sub-critical pipeline anomalies. ILI data is valuable input into the Engineering Condition Assessment process PG &E will use to identify and mitigate ground movement threats, and to identify and remove excessive pups, miter bend and wrinkle bends.



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UPDATED 11/04/11

Table 3
Expenses by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 97000510 | 24160 | SP3 TEST 0.49MI MP 180.91-181.40 PH1 | 34A | 12/1/2011 | 1,098,000 | - | - | - | **1,098,000** | WP 3-758 | WP 3-1311 |
| 2 | 9715461 | 24162 | SP5 TEST 4.04MI MP 0.00-5.57 PH1 | 34A | 12/1/2011 | 3,017,000 | - | - | - | **3,017,000** | WP 3-761 | WP 3-1312 |
| 3 | | | **Total MAT 34A - StanPac Expense** | | | **4,115,000** | **-** | **-** | **-** | **4,115,000** | | |
| 4 | | | | | | | | | | | | |
| 5 | 41482857 | 24202 | L-002 TEST 4.48MI MP 75.90-122.00 PH1 | KE1 | 12/1/2014 | - | - | - | 3,673,000 | **3,673,000** | WP 3-764 | WP 3-1313 |
| 6 | 41482922 | 24210 | L-021A_1 TEST 0.09MI MP 24.49-24.58 PH1 | KE1 | 7/1/2012 | - | 1,021,000 | - | - | **1,021,000** | WP 3-767 | WP 3-1314 |
| 7 | 41473973 | 23881 | L-021A_2 TEST 0.36MI MP 16.96-17.31 PH1 | KE1 | 7/1/2012 | - | 1 | - | - | **1** | WP 3-770 | WP 3-1315 |
| 8 | 41474090 | 23532 | L-021B TEST 18.93MI MP 0.00-18.64 PH1 | KE1 | 12/1/2013 | - | - | 6,348,000 | - | **6,348,000** | WP 3-773 | WP 3-1316 |
| 9 | 41474091 | 23533 | L-021C TEST 7.10MI MP 35.05-51.41 PH1 | KE1 | 12/1/2012 | - | 2,236,000 | - | - | **2,236,000** | WP 3-776 | WP 3-1317 |
| 10 | 41482921 | 24208 | L-021D TEST 0.28MI MP 24.67-24.95 PH1 | KE1 | 7/1/2012 | - | 1 | - | - | **1** | WP 3-779 | WP 3-1318 |
| 11 | 41483065 | 24207 | L-021E TEST 0.33MI MP 116.16-137.38 PH1 | KE1 | 7/1/2012 | - | 657,000 | - | - | **657,000** | WP 3-782 | WP 3-1319 |
| 12 | 41474092 | 23535 | L-021F TEST 5.18MI MP 2.70-19.93 PH1 | KE1 | 12/1/2012 | - | 2,373,000 | - | - | **2,373,000** | WP 3-785 | WP 3-1320 |
| 13 | 41474094 | 23538 | L-021G TEST 2.54MI MP 0.00-2.54 PH1 | KE1 | 12/1/2012 | - | 1,460,000 | - | - | **1,460,000** | WP 3-788 | WP 3-1321 |
| 14 | 41474099 | 23540 | L-050A TEST 6.38MI MP 2.55-38.63 PH1 | KE1 | 12/1/2014 | - | - | - | 2,486,000 | **2,486,000** | WP 3-791 | WP 3-1322 |
| 15 | 41482923 | 24212 | L-050A-1 TEST 0.64MI MP 1.56-2.25 PH1 | KE1 | 7/1/2013 | - | - | 908,000 | - | **908,000** | WP 3-794 | WP 3-1323 |
| 16 | 41483068 | 24168 | L-057A-MC TEST 0.45MI MP 0.00-0.42 PH1 | KE1 | 7/1/2014 | - | - | - | 922,000 | **922,000** | WP 3-797 | WP 3-1324 |
| 17 | 41482931 | 24183 | L-057A-MD1 TEST 1.13MI MP 0.00-1.13 PH1 | KE1 | 12/1/2012 | - | 968,000 | - | - | **968,000** | WP 3-800 | WP 3-1325 |
| 18 | 41482930 | 24178 | L-057A-MD2 TEST 0.32MI MP 0.00-0.32 PH1 | KE1 | 7/1/2014 | - | - | - | 877,000 | **877,000** | WP 3-803 | WP 3-1326 |
| 19 | 41474061 | 23496 | L-100 TEST 10.36MI MP 138.43-150.13 PH1 | KE1 | 12/1/2012 | - | 3,916,000 | - | - | **3,916,000** | WP 3-806 | WP 3-1327 |
| 20 | P.03758 | 23500 | L-101 TEST 0.28MI MP 2.45-3.48 PH1 | KE1 | 12/1/2011 | 1,757,000 | - | - | - | **1,757,000** | WP 3-809 | WP 3-1328 |
| 21 | 41474063 | 23502 | L-103 TEST 2.45MI MP 25.31-27.77PH1 | KE1 | 12/1/2013 | - | - | 1,235,000 | - | **1,235,000** | WP 3-812 | WP 3-1329 |
| 22 | P.03759 | 23542 | L-105A TEST 2.16MI MP 38.00-41.00 PH1 | KE1 | 12/1/2011 | 1,572,000 | - | - | - | **1,572,000** | WP 3-815 | WP 3-1330 |
| 23 | P.03766 | 24204 | L-105C TEST 1.74MI MP 0.00-1.76 PH1 | KE1 | 12/1/2011 | 1,411,000 | - | - | - | **1,411,000** | WP 3-818 | WP 3-1331 |
| 24 | P.03767 | 24560 | L-105N_1 TEST 4.88MI MP 11.07-30.63 PH1 | KE1 | 12/1/2011 | 3,931,000 | - | - | - | **3,931,000** | WP 3-821 | WP 3-1332 |
| 25 | 41473949 | 23491 | L-105N_2 TEST 0.48MI MP 21.24-21.70 PH1 | KE1 | 7/1/2012 | - | 1,007,000 | - | - | **1,007,000** | WP 3-824 | WP 3-1333 |
| 26 | 41474068 | 23505 | L-109 TEST 3.40MI MP 7.57-48.84 PH1 | KE1 | 12/1/2012 | - | 4,242,000 | - | - | **4,242,000** | WP 3-827 | WP 3-1334 |
| 27 | 41474070 | 23548 | L-118A TEST 1.30MI MP 0.00-58.74 PH1 | KE1 | 12/1/2012 | 1,067 | 2,167,933 | - | - | **2,169,000** | WP 3-830 | WP 3-1335 |
| 28 | 41474071 | 23550 | L-118B TEST 16.44MI MP 1.04-20.07 PH1 | KE1 | 12/1/2013 | - | - | 4,579,000 | - | **4,579,000** | WP 3-833 | WP 3-1336 |
| 29 | 41474072 | 23552 | L-119A TEST 3.68MI MP 0.00-14.02 PH1 | KE1 | 12/1/2012 | - | 1,643,000 | - | - | **1,643,000** | WP 3-838 | WP 3-1337 |
| 30 | 41482798 | 24262 | L-119A-1 TEST 0.25MI MP 11.14.11.36 PH1 | KE1 | 7/1/2013 | - | - | 801,000 | - | **801,000** | WP 3-841 | WP 3-1338 |
| 31 | 41474073 | 23554 | L-119B TEST 6.91MI MP 0.00-10.02 PH1 | KE1 | 12/1/2012 | - | 2,668,000 | - | - | **2,668,000** | WP 3-844 | WP 3-1339 |
| 32 | 41474075 | 23559 | L-126A TEST 9.84MI MP 0.00-10.89 PH1 | KE1 | 12/1/2014 | 71 | - | - | 3,116,929 | **3,117,000** | WP 3-847 | WP 3-1340 |
| 33 | 41474076 | 23561 | L-126B TEST 10.14MI MP 0.00-10.57 PH1 | KE1 | 12/1/2014 | - | - | - | 3,171,000 | **3,171,000** | WP 3-850 | WP 3-1341 |
| 34 | P.03752 | 24699 | L-131_1 TEST 4.41MI MP 42.35-57.47 PH1 | KE1 | 12/1/2011 | 3,559,000 | - | - | - | **3,559,000** | WP 3-853 | WP 3-1342 |
| 35 | 41474018 | 23874 | L-131_2 TEST 4.02MI MP 8.44-45.90 PH1 | KE1 | 12/1/2012 | - | 2,680,000 | - | - | **2,680,000** | WP 3-856 | WP 3-1343 |
| 36 | 41474033 | 23471 | L-131Z TEST 0.54MI MP 0.00-0.54 PH1 | KE1 | 7/1/2013 | - | - | 890,000 | - | **890,000** | WP 3-859 | WP 3-1344 |
| 37 | P.03760 | 24537 | L-132_1 TEST 42.62MI MP 0.74-51.53 PH1 | KE1 | 12/1/2011 | 21,498,000 | - | - | - | **21,498,000** | WP 3-862 | WP 3-1345 |
| 38 | 41474074 | 23557 | L-132_2 TEST MP 1.91MI 40.05-49.71 PH1 | KE1 | 12/1/2012 | - | 2,088,000 | - | - | **2,088,000** | WP 3-870 | WP 3-1347 |
| 39 | P.03761 | 23480 | L-132A TEST 1.46MI MP 0.01-1.46 PH1 | KE1 | 12/1/2011 | 1,228,000 | - | - | - | **1,228,000** | WP 3-873 | WP 3-1348 |
| 40 | 41474035 | 23487 | L-134A TEST 5.94MI MP 4.00-25.55 PH1 | KE1 | 12/1/2014 | - | - | - | 2,156,000 | **2,156,000** | WP 3-876 | WP 3-1349 |



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Table 3
Expenses by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | 41474036 | 23489 | L-137B TEST 5.29MI MP 0.00-7.37 PH1 | KE1 | 12/1/2013 | - | - | 2,220,000 | - | **2,220,000** | WP 3-879 | WP 3-1350 |
| 42 | 41474080 | 23510 | L-138 TEST 17.09MI MP 22.04-45.56 PH1 | KE1 | 12/1/2012 | - | 5,841,000 | - | - | **5,841,000** | WP 3-882 | WP 3-1351 |
| 43 | 41474037 | 23493 | L-142N TEST 11.67MI MP 0.00-14.05 PH1 | KE1 | 12/1/2012 | - | 4,373,000 | - | - | **4,373,000** | WP 3-886 | WP 3-1352 |
| 44 | 41474038 | 23495 | L-142S TEST 2.28MI MP 0.02-11.48 PH1 | KE1 | 12/1/2012 | - | 1,637,000 | - | - | **1,637,000** | WP 3-891 | WP 3-1353 |
| 45 | P.03762 | 24548 | L-147 TEST 3.11MI MP 0.17-3.40 PH1 | KE1 | 12/1/2011 | 2,491,000 | - | - | - | **2,491,000** | WP 3-894 | WP 3-1354 |
| 46 | 41474082 | 23513 | L-148 TEST 17.62MI MP 0.00-17.63 PH1 | KE1 | 12/1/2011 | 3,922,000 | - | - | - | **3,922,000** | WP 3-897 | WP 3-1355 |
| 47 | 41474083 | 23515 | L-150 TEST 6.63MI MP 6.15-18.09 PH1 | KE1 | 12/1/2013 | - | - | 2,699,000 | - | **2,699,000** | WP 3-900 | WP 3-1356 |
| 48 | 41474084 | 23517 | L-151 TEST 0.42MI MP 10.81-11.23 PH1 | KE1 | 7/1/2014 | - | - | - | 894,000 | **894,000** | WP 3-903 | WP 3-1357 |
| 49 | P.03764 | 24554 | L-153_1 TEST 17.35MI MP 0.00-22.87PH1 | KE1 | 12/1/2011 | 9,189,000 | - | - | - | **9,189,000** | WP 3-906 | WP 3-1358 |
| 50 | 41473934 | 23582 | L-153_2 TEST 10.86MI MP 3.58-27.88PH1 | KE1 | 12/1/2012 | - | 4,607,000 | - | - | **4,607,000** | WP 3-911 | WP 3-1359 |
| 51 | 41474040 | 23498 | L-158-1 TEST 2.58MI MP 11.07-13.65 PH1 | KE1 | 12/1/2014 | - | - | - | 1,296,000 | **1,296,000** | WP 3-914 | WP 3-1360 |
| 52 | 41474041 | 23499 | L-162A TEST 1.69MI MP 4.41-9.03 PH1 | KE1 | 12/1/2013 | - | - | 1,338,000 | - | **1,338,000** | WP 3-917 | WP 3-1361 |
| 53 | 41474042 | 23501 | L-172A TEST 2.11MI MP 35.51-67.50 PH1 | KE1 | 12/1/2012 | - | 2,407,000 | - | - | **2,407,000** | WP 3-920 | WP 3-1362 |
| 54 | 41474043 | 23503 | L-177A TEST 0.33MI MP 88.50-88.83 PH1 | KE1 | 7/1/2012 | - | 828,000 | - | - | **828,000** | WP 3-923 | WP 3-1363 |
| 55 | 41474044 | 23506 | L-177B TEST 6.65MI MP 0.86-7.51 PH1 | KE1 | 12/1/2013 | - | - | 2,221,000 | - | **2,221,000** | WP 3-926 | WP 3-1364 |
| 56 | 41474046 | 23509 | L-181B TEST 1.55MI MP 0.64-2.17 PH1 | KE1 | 12/1/2013 | - | - | 1,076,000 | - | **1,076,000** | WP 3-929 | WP 3-1365 |
| 57 | 41482928 | 24217 | L-183 TEST 0.32MI MP 5.96-6.29 PH1 | KE1 | 7/1/2014 | - | - | - | 876,000 | **876,000** | WP 3-932 | WP 3-1366 |
| 58 | 41474086 | 23521 | L-186 TEST 2.08MI MP 9.20-26.13 PH1 | KE1 | 12/1/2014 | - | - | - | 1,681,000 | **1,681,000** | WP 3-935 | WP 3-1367 |
| 59 | 41474087 | 23524 | L-187 TEST 39.21MI MP 22.58-65.70 PH1 | KE1 | 12/1/2013 | - | - | 9,681,000 | - | **9,681,000** | WP 3-938 | WP 3-1368 |
| 60 | P.03765 | 24555 | L-191 TEST 3.96MI MP 6.47-10.47 PH1 | KE1 | 12/1/2011 | 2,415,000 | - | - | - | **2,415,000** | WP 3-942 | WP 3-1369 |
| 61 | 41474047 | 23511 | L-191-1 TEST 10.07MI MP 9.59-35.83 PH1 | KE1 | 12/1/2012 | - | 3,494,000 | - | - | **3,494,000** | WP 3-945 | WP 3-1370 |
| 62 | 41474048 | 23514 | L-191A TEST 4.89MI MP 0.00-4.84 PH1 | KE1 | 12/1/2014 | - | - | - | 1,714,000 | **1,714,000** | WP 3-948 | WP 3-1371 |
| 63 | 41474089 | 23494 | L-195A3-1 TEST 0.48MI MP 0.00-0.48 PH1 | KE1 | 7/1/2013 | - | - | 878,000 | - | **878,000** | WP 3-951 | WP 3-1372 |
| 64 | 41474060 | 23527 | L-196A TEST 0.46MI MP 11.49-11.93 PH1 | KE1 | 7/1/2014 | - | - | - | 902,000 | **902,000** | WP 3-954 | WP 3-1373 |
| 65 | 41474051 | 23520 | L-197B TEST 5.18MI MP 0.00-5.49 PH1 | KE1 | 12/1/2014 | - | - | - | 1,762,000 | **1,762,000** | WP 3-957 | WP 3-1374 |
| 66 | 41474052 | 23522 | L-197C-1 TEST 2.34MI MP 14.73-17.05 PH1 | KE1 | 12/1/2014 | - | - | - | 1,251,000 | **1,251,000** | WP 3-960 | WP 3-1375 |
| 67 | 41482859 | 24205 | L-197C-2 TEST 2.88MI MP 0.55-3.43 PH1 | KE1 | 12/1/2014 | - | - | - | 1,350,000 | **1,350,000** | WP 3-963 | WP 3-1376 |
| 68 | 41482793 | 24264 | L-200A-1 TEST 0.34MI MP 1.08-1.42 PH1 | KE1 | 7/1/2012 | - | 829,000 | - | - | **829,000** | WP 3-966 | WP 3-1377 |
| 69 | 41474101 | 23525 | L-210B TEST 13.54MI MP 7.57-25.98 PH1 | KE1 | 12/1/2012 | - | 4,965,000 | - | - | **4,965,000** | WP 3-969 | WP 3-1378 |
| 70 | 41482927 | 24216 | L-210C TEST 0.10MI MP 31.64-31.74 PH1 | KE1 | 7/1/2012 | - | 1 | - | - | **1** | WP 3-972 | WP 3-1379 |
| 71 | 41474095 | 23528 | L-220 TEST 4.58MI MP 23.14-27.68 PH1 | KE1 | 12/1/2014 | - | - | - | 1,661,000 | **1,661,000** | WP 3-975 | WP 3-1380 |
| 72 | P.03754 | 24495 | L-300A_1 TEST 58.46MI MP 0.29-502.24 PH1 | KE1 | 12/1/2011 | 32,911,000 | - | - | - | **32,911,000** | WP 3-978 | WP 3-1381 |
| 73 | 41474039 | 23497 | L-300A_2 TEST 21.67MI MP 230.32-490.59 PH1 | KE1 | 12/1/2012 | - | 11,359,000 | - | - | **11,359,000** | WP 3-985 | WP 3-1384 |
| 74 | P.03754 | 24492 | L-300A-1 TEST 0.61MI MP 156.40-157.01 PH1 | KE1 | 12/1/2011 | 1,128,000 | - | - | - | **1,128,000** | WP 3-989 | WP 3-1385 |
| 75 | P.03756 | 24521 | L-300B_1 TEST 59.49MI MP 0.00-502.64 PH1 | KE1 | 12/1/2011 | 24,871,000 | - | - | - | **24,871,000** | WP 3-992 | WP 3-1386 |
| 76 | 41483066 | 24219 | L-300B_2 TEST 12.35MI MP 148.90-283.14 PH1 | KE1 | 12/1/2014 | - | - | - | 6,348,000 | **6,348,000** | WP 3-998 | WP 3-1388 |
| 77 | 41474056 | 23536 | L-303 TEST 1.16MI MP 19.21-20.43 PH1 | KE1 | 2/1/2012 | - | 1,524,000 | - | - | **1,524,000** | WP 3-1001 | WP 3-1389 |
| 78 | 41474096 | 23529 | L-306 TEST 7.24MI MP 0.00-70.02 PH1 | KE1 | 12/1/2012 | - | 3,555,000 | - | - | **3,555,000** | WP 3-1004 | WP 3-1390 |
| 79 | 41474097 | 23530 | L-314 TEST 4.34MI MP 20.91-24.92 PH1 | KE1 | 12/1/2014 | - | - | - | 1,617,000 | **1,617,000** | WP 3-1007 | WP 3-1391 |
| 80 | 41474098 | 23492 | L-318-12 TEST 2.02MI MP 0.00-0.00 PH1 | KE1 | 12/1/2014 | - | - | - | 1,193,000 | **1,193,000** | WP 3-1010 | WP 3-1392 |



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Table 3
Expenses by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81 | 41483067 | 24220 | L-331A TEST 0.34MI MP 8.06-8.40 PH1 | KE1 | 7/1/2013 | - | - | 1 | - | **1** | WP 3-1013 | WP 3-1393 |
| 82 | 41474057 | 23539 | L-400_1 TEST 17MI MP 80.04-298.84 PH1 | KE1 | 12/1/2013 | - | - | 10,051,000 | - | **10,051,000** | WP 3-1016 | WP 3-1394 |
| 83 | 41483064 | 24201 | L-400_2 TEST 17.5MI MP 122.22-139.73 PH1 | KE1 | 12/1/2014 | - | - | - | 13,089,000 | **13,089,000** | WP 3-1019 | WP 3-1395 |
| 84 | P.03757 | 23551 | L-400-3 TEST 4.00MI MP 295.91-299.91 PH1 | KE1 | 12/1/2011 | 2,424,000 | - | - | - | **2,424,000** | WP 3-1022 | WP 3-1396 |
| 85 | 41474031 | 23531 | L-401 TEST 0.80MI MP 323.44-326.76 PH1 | KE1 | 12/1/2012 | - | 1,973,000 | - | - | **1,973,000** | WP 3-1025 | WP 3-1397 |
| 86 | 41473886 | 23556 | DFM-0115-01 TEST 0.40MI MP 0.00-0.41 PH1 | KE1 | 12/1/2014 | - | - | - | 897,000 | **897,000** | WP 3-1028 | WP 3-1398 |
| 87 | 41473887 | 23558 | DFM-0126-01 TEST 0.07MI MP 1.76-1.84 PH1 | KE1 | 7/1/2012 | - | 1 | - | - | **1** | WP 3-1031 | WP 3-1399 |
| 88 | 41473888 | 23560 | DFM-0141-01 TEST 0.43MI MP 0.00-0.42 PH1 | KE1 | 7/1/2014 | - | - | - | 896,000 | **896,000** | WP 3-1034 | WP 3-1400 |
| 89 | 41482926 | 24215 | DFM-0210-01 TEST 6.27MI MP 0.00-6.62 PH1 | KE1 | 12/1/2013 | - | - | 2,154,000 | - | **2,154,000** | WP 3-1037 | WP 3-1401 |
| 90 | 41473891 | 23566 | DFM-0211-01 TEST 0.68MI MP 0.00-0.68 PH1 | KE1 | 7/1/2014 | - | - | - | 680,000 | **680,000** | WP 3-1040 | WP 3-1402 |
| 91 | 41473985 | 23927 | DFM-0213-02 TEST 0.90MI MP 0.00-0.94 PH1 | KE1 | 7/1/2014 | - | - | - | 981,000 | **981,000** | WP 3-1043 | WP 3-1403 |
| 92 | 41473893 | 23570 | DFM-0215-01 TEST 0.95MI MP 0.00-0.98 PH1 | KE1 | 7/1/2013 | - | - | 962,000 | - | **962,000** | WP 3-1046 | WP 3-1404 |
| 93 | 41473895 | 23574 | DFM-0401-01 TEST 5.44MI MP 0.03-5.48 PH1 | KE1 | 12/1/2012 | - | 1,733,000 | - | - | **1,733,000** | WP 3-1049 | WP 3-1405 |
| 94 | 41473897 | 23578 | DFM-0402-01 TEST 0.69MI MP 0.27-2.36 PH1 | KE1 | 7/1/2012 | - | 1,370,000 | - | - | **1,370,000** | WP 3-1052 | WP 3-1406 |
| 95 | 41473920 | 23584 | DFM-0405-01 TEST 3.25MI MP 1.09-16.54 PH1 | KE1 | 12/1/2013 | - | - | 1,255,000 | - | **1,255,000** | WP 3-1055 | WP 3-1407 |
| 96 | 41473922 | 23588 | DFM-0406-03 TEST 0.76MI MP 0.08-0.81 PH1 | KE1 | 7/1/2014 | - | - | - | 955,000 | **955,000** | WP 3-1059 | WP 3-1408 |
| 97 | 41473923 | 23590 | DFM-0407-01 TEST 4.36MI MP 0.00-4.34 PH1 | KE1 | 12/1/2012 | - | 1,079,000 | - | - | **1,079,000** | WP 3-1062 | WP 3-1409 |
| 98 | 41473924 | 23563 | DFM-0601-01 TEST 0.36MI MP 0.09-0.46 PH1 | KE1 | 7/1/2014 | - | - | - | 556,000 | **556,000** | WP 3-1065 | WP 3-1410 |
| 99 | 41473925 | 23565 | DFM-0604-01 TEST 1.08MI MP 0.00-4.71 PH1 | KE1 | 12/1/2013 | - | - | 1,234,000 | - | **1,234,000** | WP 3-1068 | WP 3-1411 |
| 100 | 41473926 | 23567 | DFM-0604-06 TEST 2.29MI MP 0.00-2.28 PH1 | KE1 | 12/1/2014 | - | - | - | 1,240,000 | **1,240,000** | WP 3-1071 | WP 3-1412 |
| 101 | 41473927 | 23569 | DFM-0604-07 TEST 6.25MI MP 0.01-6.41 PH1 | KE1 | 12/1/2013 | - | - | 2,096,000 | - | **2,096,000** | WP 3-1074 | WP 3-1413 |
| 102 | 41473930 | 23575 | DFM-0611-01 TEST 1.07MI MP 0.00-1.07 PH1 | KE1 | 12/1/2012 | - | 978,000 | - | - | **978,000** | WP 3-1077 | WP 3-1414 |
| 103 | 41473931 | 23577 | DFM-0611-02 TEST 1.50MI MP 0.00-1.91 PH1 | KE1 | 12/1/2012 | - | 1,023,000 | - | - | **1,023,000** | WP 3-1080 | WP 3-1415 |
| 104 | 41482853 | 24196 | DFM-0611-05 TEST 0.12MI MP 0.00-0.12 PH1 | KE1 | 7/1/2012 | - | 909,000 | - | - | **909,000** | WP 3-1084 | WP 3-1416 |
| 105 | 41473962 | 23884 | DFM-0621-01 TEST 0.68MI MP 0.02-0.70 PH1 | KE1 | 7/1/2014 | - | - | - | 909,000 | **909,000** | WP 3-1087 | WP 3-1417 |
| 106 | 41473936 | 23587 | DFM-0630-01 TEST 0.07MI MP 1.33-1.40 PH1 | KE1 | 7/1/2014 | - | - | - | 831,000 | **831,000** | WP 3-1090 | WP 3-1418 |
| 107 | 41473965 | 23835 | DFM-0638-02 TEST 1.24MI MP 1.69-2.93 PH1 | KE1 | 12/1/2014 | - | - | - | 1 | **1** | WP 3-1093 | WP 3-1419 |
| 108 | 41473966 | 23843 | DFM-0651-01 TEST 0.86MI MP 1.01-1.87 PH1 | KE1 | 7/1/2012 | - | 1 | - | - | **1** | WP 3-1096 | WP 3-1420 |
| 109 | 41473969 | 23861 | DFM-0813-01 TEST 1.30MI MP 0.00-1.29 PH1 | KE1 | 12/1/2012 | - | 1,002,000 | - | - | **1,002,000** | WP 3-1099 | WP 3-1421 |
| 110 | 41473970 | 23866 | DFM-0813-02 TEST 0.50MI MP 0.00-0.50 PH1 | KE1 | 7/1/2014 | - | - | - | 910,000 | **910,000** | WP 3-1102 | WP 3-1422 |
| 111 | 41473971 | 23871 | DFM-0814-05 TEST 0.31MI MP 0.00-0.31 PH1 | KE1 | 7/1/2013 | - | - | 849,000 | - | **849,000** | WP 3-1105 | WP 3-1423 |
| 112 | 41473972 | 23876 | DFM-0817-01 TEST 1.31MI MP 0.00-1.30 PH1 | KE1 | 12/1/2013 | - | - | 1,034,000 | - | **1,034,000** | WP 3-1108 | WP 3-1424 |
| 113 | 41473974 | 23885 | DFM-1004-01 TEST 0.35MI MP 4.40-4.75 PH1 | KE1 | 7/1/2014 | - | - | - | 882,000 | **882,000** | WP 3-1111 | WP 3-1425 |
| 114 | 41473975 | 23892 | DFM-1023-01 TEST 2.83MI MP 0.00-2.83 PH1 | KE1 | 12/1/2013 | - | - | 1,249,000 | - | **1,249,000** | WP 3-1114 | WP 3-1426 |
| 115 | 41473976 | 23894 | DFM-1027-01 TEST 1.21MI MP 3.46-6.58 PH1 | KE1 | 12/1/2014 | - | - | - | 1,293,000 | **1,293,000** | WP 3-1117 | WP 3-1427 |
| 116 | 41483062 | 24193 | DFM-1027-04 TEST 0.92MI MP 0.70-1.62 PH1 | KE1 | 12/1/2014 | - | - | - | 992,000 | **992,000** | WP 3-1120 | WP 3-1428 |
| 117 | 41482847 | 24187 | DFM-1202-01 TEST 2.13MI MP 0.00-2.13 PH1 | KE1 | 12/1/2012 | - | 1,367,000 | - | - | **1,367,000** | WP 3-1123 | WP 3-1429 |
| 118 | 41482846 | 24186 | DFM-1202-02 TEST 0.39MI MP 2.00-2.39 PH1 | KE1 | 7/1/2013 | - | - | 1,000,000 | - | **1,000,000** | WP 3-1126 | WP 3-1430 |
| 119 | 41482845 | 24185 | DFM-1202-03 TEST 0.39MI MP 0.00-0.39 PH1 | KE1 | 7/1/2014 | - | - | - | 889,000 | **889,000** | WP 3-1129 | WP 3-1431 |
| 120 | 41473979 | 23901 | DFM-1202-16 TEST 2.50MI MP 0.08-2.58 PH1 | KE1 | 12/1/2013 | - | - | 1,245,000 | - | **1,245,000** | WP 3-1132 | WP 3-1432 |



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Table 3
Expenses by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 121 | 41473980 | 23903 | DFM-1209-02 TEST 1.48MI MP 0.00-1.47 PH1 | KE1 | 12/1/2013 | 3,023 | - | 1,059,977 | - | **1,063,000** | WP 3-1135 | WP 3-1433 |
| 122 | 41473982 | 23918 | DFM-1301-01 TEST 4.40MI MP 0.00-4.63 PH1 | KE1 | 12/1/2014 | - | - | - | 1,874,000 | **1,874,000** | WP 3-1138 | WP 3-1434 |
| 123 | 41473961 | 23878 | DFM-1306-01 TEST 0.72MI MP 0.01-0.72 PH1 | KE1 | 7/1/2014 | - | - | - | 949,000 | **949,000** | WP 3-1141 | WP 3-1435 |
| 124 | 41473987 | 23931 | DFM-1310-01 TEST 1.28MI MP 0.00-1.29 PH1 | KE1 | 12/1/2014 | - | - | - | 1,058,000 | **1,058,000** | WP 3-1144 | WP 3-1436 |
| 125 | 41473988 | 23934 | DFM-1401-01 TEST 0.80MI MP 0.00-0.79 PH1 | KE1 | 7/1/2012 | - | 1,061,000 | - | - | **1,061,000** | WP 3-1147 | WP 3-1437 |
| 126 | 41473990 | 23911 | DFM-1501-01 TEST 5.55MI MP 0.00-6.88 PH1 | KE1 | 12/1/2014 | - | - | - | 2,086,000 | **2,086,000** | WP 3-1150 | WP 3-1438 |
| 127 | 41473991 | 23912 | DFM-1501-02 TEST 0.80MI MP 0.62-2.44 PH1 | KE1 | 12/1/2014 | - | - | - | 1,218,000 | **1,218,000** | WP 3-1153 | WP 3-1439 |
| 128 | 41473992 | 23913 | DFM-1502-02 TEST 1.60MI MP 0.00-1.60 PH1 | KE1 | 12/1/2014 | - | - | - | 1,115,000 | **1,115,000** | WP 3-1156 | WP 3-1440 |
| 129 | 41473933 | 23581 | DFM-1502-06 TEST 0.32MI MP 0.00-0.32 PH1 | KE1 | 7/1/2014 | - | - | - | 876,000 | **876,000** | WP 3-1159 | WP 3-1441 |
| 130 | 41473932 | 23579 | DFM-1502-11 TEST 1.98MI MP 0.00-2.96 PH1 | KE1 | 12/1/2014 | - | - | - | 1,434,000 | **1,434,000** | WP 3-1162 | WP 3-1442 |
| 131 | 41474066 | 23545 | DFM-1519-01 TEST 0.55MI MP 1.48-2.03 PH1 | KE1 | 7/1/2013 | - | - | 891,000 | - | **891,000** | WP 3-1165 | WP 3-1443 |
| 132 | 41473999 | 23841 | DFM-1601-09 TEST 0.86MI MP 0.00-0.86 PH1 | KE1 | 7/1/2014 | - | - | - | 975,000 | **975,000** | WP 3-1168 | WP 3-1444 |
| 133 | 41482842 | 24272 | DFM-1603-01 TEST 1.23MI MP 0.07-1.30 PH1 | KE1 | 12/1/2013 | - | - | 1,020,000 | - | **1,020,000** | WP 3-1171 | WP 3-1445 |
| 134 | 41474000 | 23842 | DFM-1603-03 TEST 0.48MI MP 0.00-0.48 PH1 | KE1 | 7/1/2014 | - | - | - | 863,000 | **863,000** | WP 3-1174 | WP 3-1446 |
| 135 | 41474002 | 23847 | DFM-1614-01 TEST 3.97MI MP 0.00-3.97 PH1 | KE1 | 12/1/2014 | - | - | - | 1,549,000 | **1,549,000** | WP 3-1177 | WP 3-1447 |
| 136 | 41474005 | 23856 | DFM-1615-01 TEST 8.03MI MP 6.72-14.74 PH | KE1 | 12/1/2012 | - | 2,393,000 | - | - | **2,393,000** | WP 3-1180 | WP 3-1448 |
| 137 | 41474007 | 23857 | DFM-1615-07 TEST 0.25MI MP 0.01-0.25 PH1 | KE1 | 7/1/2014 | - | - | - | 1 | **1** | WP 3-1183 | WP 3-1449 |
| 138 | 41483061 | 24274 | DFM-1617-01 TEST 0.82MI MP 0.00-0.82 PH1 | KE1 | 7/1/2013 | - | - | 939,000 | - | **939,000** | WP 3-1187 | WP 3-1450 |
| 139 | 41474008 | 23860 | DFM-1622-01 TEST 0.99MI MP 0.00-1.00 PH1 | KE1 | 7/1/2014 | - | - | - | 998,000 | **998,000** | WP 3-1190 | WP 3-1451 |
| 140 | 41474001 | 23846 | DFM-1640-01 TEST 0.70MI MP 0.00-0.70 PH1 | KE1 | 7/1/2014 | - | - | - | 945,000 | **945,000** | WP 3-1193 | WP 3-1452 |
| 141 | 41474011 | 23872 | DFM-1813-02 TEST 5.17MI MP 8.93-16.39 PH1 | KE1 | 12/1/2013 | - | - | 1,957,000 | - | **1,957,000** | WP 3-1196 | WP 3-1453 |
| 142 | 41474012 | 23877 | DFM-1815-02 TEST 9.80MI MP 6.50-16.85 PH1 | KE1 | 12/1/2013 | - | - | 3,020,000 | - | **3,020,000** | WP 3-1199 | WP 3-1454 |
| 143 | 41474013 | 23880 | DFM-1815-15 TEST 1.98MI MP 0.18-2.13 PH1 | KE1 | 12/1/2013 | - | - | 1,357,000 | - | **1,357,000** | WP 3-1202 | WP 3-1455 |
| 144 | P.03751 | 24484 | DFM-1816-01_1 TEST 9.38MI MP 0.00-8.44 PH1 | KE1 | 12/31/2011 | 2,631,000 | - | - | - | **2,631,000** | WP 3-1205 | WP 3-1456 |
| 145 | 41473986 | 23929 | DFM-1816-01_2 TEST 9.17MI MP 8.44-18.25 PH1 | KE1 | 12/1/2013 | - | - | 2,668,000 | - | **2,668,000** | WP 3-1209 | WP 3-1457 |
| 146 | 41474015 | 23858 | DFM-1816-02 TEST 0.12MI MP 0.00-0.12 PH1 | KE1 | 7/1/2013 | - | - | 816,000 | - | **816,000** | WP 3-1212 | WP 3-1458 |
| 147 | 41474016 | 23864 | DFM-1816-05 TEST 0.80MI MP 0.00-0.80 PH1 | KE1 | 7/1/2014 | - | - | - | 963,000 | **963,000** | WP 3-1215 | WP 3-1459 |
| 148 | 41474017 | 23870 | DFM-1816-15 TEST 6.04MI MP 0.00-6.01 PH1 | KE1 | 12/1/2013 | - | - | 2,112,000 | - | **2,112,000** | WP 3-1218 | WP 3-1460 |
| 149 | 41474019 | 23879 | DFM-1819-01 TEST 0.64MI MP 0.42-1.07 PH1 | KE1 | 7/1/2014 | - | - | - | 757,000 | **757,000** | WP 3-1221 | WP 3-1461 |
| 150 | 41474020 | 23883 | DFM-1869-01 TEST 0.16MI MP 0.00-0.16 PH1 | KE1 | 7/1/2014 | - | - | - | 847,000 | **847,000** | WP 3-1224 | WP 3-1462 |
| 151 | 41474021 | 23886 | DFM-1870-01 TEST 3.33MI MP 0.00-3.33 PH1 | KE1 | 12/1/2014 | - | - | - | 1,432,000 | **1,432,000** | WP 3-1227 | WP 3-1463 |
| 152 | 41482848 | 24188 | DFM-2403-12 TEST 2.88MI MP 0.00-2.88 PH1 | KE1 | 12/1/2012 | - | 1,250,000 | - | - | **1,250,000** | WP 3-1230 | WP 3-1464 |
| 153 | 41474024 | 23895 | DFM-2408-01 TEST 0.99MI MP 2.32-2.72 PH1 | KE1 | 7/1/2014 | - | - | - | 998,000 | **998,000** | WP 3-1233 | WP 3-1465 |
| 154 | 41474028 | 23905 | DFM-3010-01 TEST 1.27MI MP 0.00-1.27 PH1 | KE1 | 12/1/2012 | 995 | 995,005 | - | - | **996,000** | WP 3-1236 | WP 3-1466 |
| 155 | 41474029 | 23906 | DFM-3017-01 TEST 6.68MI MP 0.02-6.95 PH1 | KE1 | 12/1/2013 | - | - | 2,226,000 | - | **2,226,000** | WP 3-1239 | WP 3-1467 |
| 156 | 41474030 | 23907 | DFM-6603-01 TEST 2.18MI MP 3.96-6.14 PH1 | KE1 | 12/1/2014 | - | - | - | 1,223,000 | **1,223,000** | WP 3-1242 | WP 3-1468 |
| 157 | 41482924 | 24213 | DFM-7204-01 TEST 0.06MI MP 1.90-1.96 PH1 | KE1 | 7/1/2014 | - | - | - | 829,000 | **829,000** | WP 3-1245 | WP 3-1469 |
| 158 | 41482854 | 24197 | DFM-7218-01 TEST 1.32MI MP 0.00-1.32 PH1 | KE1 | 12/1/2013 | - | - | 1,034,000 | - | **1,034,000** | WP 3-1248 | WP 3-1470 |
| 159 | 41473939 | 23467 | DFM-7221-10 TEST 6.10MI MP 7.45-15.99 PH1 | KE1 | 12/1/2012 | - | 2,050,000 | - | - | **2,050,000** | WP 3-1251 | WP 3-1471 |
| 160 | 41473941 | 23470 | DFM-7222-01 TEST 13.55MI MP 0.09-13.99 PH1 | KE1 | 12/1/2014 | - | - | - | 3,991,000 | **3,991,000** | WP 3-1255 | WP 3-1472 |



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Pacific Gas and Electric Company
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UPDATED 11/04/11

Table 3
Expenses by Maintenance Activity Type (MAT)

| Line No | Order | PSRS Id | Order Description | MAT | Operative Date | 2011 | 2012 | 2013 | 2014 | Total | Workpaper Reference | Map Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | 41473942 | 23472 | DFM-7223-01 TEST 9.90MI MP 0.15-10.05 PH1 | KE1 | 12/1/2013 | - | - | 2,798,000 | - | **2,798,000** | WP 3-1259 | WP 3-1473 |
| 162 | 41473943 | 23474 | DFM-7224-09 TEST 1.35MI MP 0.00-1.35 PH1 | KE1 | 12/1/2014 | - | - | - | 1,070,000 | **1,070,000** | WP 3-1262 | WP 3-1474 |
| 163 | 41473944 | 23477 | DFM-7224-12 TEST 0.48MI MP 0.25-0.73 PH1 | KE1 | 7/1/2013 | - | - | 880,000 | - | **880,000** | WP 3-1265 | WP 3-1475 |
| 164 | 41473945 | 23478 | DFM-7226-01 TEST 5.59MI MP 0.00-5.59 PH1 | KE1 | 12/1/2013 | - | - | 2,034,000 | - | **2,034,000** | WP 3-1268 | WP 3-1476 |
| 165 | 41473946 | 23481 | DFM-7226-02 TEST 0.39MI MP 3.47-3.86 PH1 | KE1 | 7/1/2013 | - | - | 869,000 | - | **869,000** | WP 3-1271 | WP 3-1477 |
| 166 | 41473947 | 23483 | DFM-7226-13 TEST 0.25MI MP 0.00-0.25 PH1 | KE1 | 7/1/2014 | - | - | - | 864,000 | **864,000** | WP 3-1274 | WP 3-1478 |
| 167 | 41482925 | 24214 | DFM-7227-05 TEST 0.19MI MP 0.00-0.19 PH1 | KE1 | 7/1/2013 | - | - | 829,000 | - | **829,000** | WP 3-1277 | WP 3-1479 |
| 168 | | | **Total MAT KE1 - Imp Plan Pressure Test** | | | **116,943,156** | **93,728,943** | **84,512,978** | **93,860,931** | **389,046,008** | | |
| 169 | | | | | | | | | | | | |
| 170 | 41476259 | 24027 | L-101 MP 0.00-11.62 ILI & ANALYSIS PH1 | KE3 | 11/1/2014 | - | - | - | 1,087,000 | **1,087,000** | WP 3-1280 | WP 3-1480 |
| 171 | 41476300 | 24028 | L-101 MP 11.62-33.68 ILI & ANALYSIS PH1 | KE3 | 11/1/2014 | - | - | - | 1,655,000 | **1,655,000** | WP 3-1284 | WP 3-1481 |
| 172 | 41482821 | 24010 | L-131 MP 50.5-57.4 ILI & ANALYSIS PH-1 | KE3 | 11/1/2013 | - | - | 300,000 | 497,000 | **797,000** | WP 3-1289 | WP 3-1482 |
| 173 | 41482737 | 24026 | L-132 MP 31.7-38.4 ILI & ANALYSIS PH-1 | KE3 | 11/1/2013 | - | - | 325,000 | 499,000 | **824,000** | WP 3-1292 | WP 3-1483 |
| 174 | 41483499 | 24024 | L-300A MP 299-352 ILI & ANALYSIS PH-1 | KE3 | 11/1/2014 | - | - | - | 1,326,000 | **1,326,000** | WP 3-1295 | WP 3-1484 |
| 175 | 41482736 | 24022 | L-300A MP 352.3-391.2 ILI & ANALYSIS PH-1 | KE3 | 11/1/2013 | - | - | 500,000 | 788,000 | **1,288,000** | WP 3-1299 | WP 3-1485 |
| 176 | 41482735 | 24018 | L-300B MP 299.0-351.8 ILI & ANALYSIS PH-1 | KE3 | 11/1/2014 | - | - | - | 1,326,000 | **1,326,000** | WP 3-1302 | WP 3-1486 |
| 177 | 41482734 | 24015 | L-300B MP 351.8-390.9 ILI & ANALYSIS PH-1 | KE3 | 11/1/2013 | - | - | 600,000 | 688,000 | **1,288,000** | WP 3-1305 | WP 3-1487 |
| 178 | | | **Total MAT KE3 - Imp Plan Pipeline ILI** | | | **-** | **-** | **1,725,000** | **7,866,000** | **9,591,000** | | |
| 179 | | | | | | | | | | | | |
| 180 | 41521348 | 24913 | Engineering Condition Assessment | KEX | 12/31/2014 | - | 1,000,000 | 1,030,000 | 1,060,000 | **3,090,000** | WP 3-1308 | n/a |
| 181 | 41521349 | 24914 | Remaining Life Fatigue Analysis | KEX | 12/31/2014 | 100,000 | 150,000 | 25,000 | 25,000 | **300,000** | WP 3-1309 | n/a |
| 182 | 41457916 | 23163 | Imp Plan - Pipeline Planning Exp | KEX | 12/31/2011 | 1,500,000 | - | - | - | **1,500,000** | WP 3-1310 | n/a |
| 183 | | | **Total MAT KEX - Imp Plan Pipeline Other** | | | **1,600,000** | **1,150,000** | **1,055,000** | **1,085,000** | **4,890,000** | | |
| 184 | | | | | | | | | | | | |
| 185 | | | **Total Pipeline Modernization Expense Projects** | | | **122,658,156** | **94,878,943** | **87,292,978** | **102,811,931** | **407,642,008** | | |



SB_GT&S_0675598

**Pacific Gas and Electric Company**
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**PROJECT SUMMARY**

Reference: WP 3-753, Table 3, Line 1

| | |
|---|---|
| TITLE: | SP3 TEST 0.49MI MP 180.91-181.40 PH1 |
| ORDER NO: | 97000510 |
| PSRS NO. | 24160 |
| MAT CODE: | 34A |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **1,098** | **0** | **0** | **0** |

**DESCRIPTION**: Hydrotest 0.49 miles of pipeline SP3 between MP 80.91 and MP 181.40. The total number of segments to be hydrotested is 6.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 0 | 0 | 2,597 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

6 segment(s) totaling 2,597 feet of pipe installed prior to 1970 operating above 30% SMYS within a Class Location 2-4 or HCA.

This Stanpac pipeline is co-owned by PG&E and Chevron. Chevron is responsible for 1/7 of the project costs. Therefore, PG&E is only forecasting 6/7 of the total project cost in this Implementation Plan.



SB_GT&S_0675599

**Pacific Gas and Electric Company**
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**PROJECT SUMMARY**

Reference: WP 3-753, Table 3, Line 2

| | |
|---|---|
| TITLE: | SP5 TEST 4.04MI MP 0.00-5.57 PH1 |
| ORDER NO: | 9715461 |
| PSRS NO. | 24162 |
| MAT CODE: | 34A |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **3,017** | **0** | **0** | **0** |

**DESCRIPTION**: Hydrotest 4.04 miles of pipeline SP5 between MP 0.00 and MP 5.57. The total number of segments to be hydrotested is 17.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 0 | 0 | 20,447 | 885 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 13 segment(s) totaling 17,021 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 1 segment(s) totaling 78 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 3 segment(s) totaling 4,233 feet of pipe that has a documented strength test is included in this project for construction efficiency.

This Stanpac pipeline is co-owned by PG&E and Chevron. Chevron is responsible for 1/7 of the project costs. Therefore, PG&E is only forecasting 6/7 of the total project cost in this Implementation Plan.



SB_GT&S_0675600

# Pacific Gas and Electric Company
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## PROJECT SUMMARY

Reference: WP 3-753, Table 3, Line 11

| | |
|---|---|
| TITLE: | L-021E TEST 0.33MI MP 116.16-137.38 PH1 |
| ORDER NO: | 41483065 |
| PSRS NO. | 24207 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 7/1/2012 |
| AFUDC ELIGIBLE: | N/A |

### ESCALATED FINANCIAL EXPENDITURES (Expense)
### ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **657** | **0** | **0** |

**DESCRIPTION**: Hydrotest 0.33 miles of pipeline L-021E between MP 116.16 and MP 137.38. The total number of segments to be hydrotested is 4.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 1,747 | 0 | 0 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 105 fe et of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 2 segment(s) totaling 664 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.

In addition, 1 segment(s) totaling 978 feet of pipe that has a documented strength test is included in this project for construction efficiency.

Included in this project is 664 feet of pipe that was installed after 1970, and PG&E has not been able to confirm complete strength test documentation. The cost to strength test the post-1970 pipe is forecasted to be $403,000 and is NOT included in the cost forecast for this project. The costs associated with strength tes ting post-70 pipe without a verified strength test will be charged to a separate order for which incremental cost recovery is not being requested.



SB_GT&S_0675601

**Pacific Gas and Electric Company**
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**PROJECT SUMMARY**

Reference: WP 3-753, Table 3, Line 20

| | |
|---|---|
| TITLE: | L-101 TEST 0.28MI MP 2.45-3.48 PH1 |
| ORDER NO: | P.03758 |
| PSRS NO. | 23500 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **1,757** | **0** | **0** | **0** |

**DESCRIPTION**: Hydrotest 0.28 miles of pipeline L-101 between MP 2.45 and MP 3.48. The total number of segments to be hydrotested is 13.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 0 | 0 | 0 | 1,473 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 5 segment(s) totaling 1,135 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 4 segment(s) totaling 20 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 4 segment(s) totaling 318 feet of pipe that has a documented strength test is included in this project for construction efficiency.



SB_GT&S_0675602

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**PROJECT SUMMARY**

Reference: WP 3-753, Table 3, Line 22

| | |
|---|---|
| TITLE: | L-105A TEST 2.16MI MP 38.00-41.00 PH1 |
| ORDER NO: | P.03759 |
| PSRS NO. | 23542 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **1,572** | **0** | **0** | **0** |

**DESCRIPTION**: Hydrotest 2.16 miles of pipeline L-105A between MP 38.00 and MP 41.00. The total number of segments to be hydrotested is 5.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 0 | 4 | 0 | 11,379 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 4 feet of pipe installed prior to 1970 operating below 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 4 segment(s) totaling 11,379 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.



SB_GT&S_0675603

**Pacific Gas and Electric Company**
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**PROJECT SUMMARY**

Reference: WP 3-753, Table 3, Line 24

| | |
|---|---|
| TITLE: | L-105N_1 TEST 4.88 MI MP 11.07-30.63 PH1 |
| ORDER NO: | P.03767 |
| PSRS NO. | 24560 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **3,931** | **0** | **0** | **0** |

**DESCRIPTION**: Hydrotest 4.88 miles of pipeline L- 105N between MP 11.07 and MP 30.63. The total number of segments to be hydrotested is 28.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 0 | 109 | 15,663 | 10,001 |

**JUSTIFICATION**:
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 16 segment(s) totaling 18,415 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 12 segment(s) totaling 7,358 feet of pipe that has a document ed strength test is included in this project for construction efficiency.



SB_GT&S_0675604

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**PROJECT SUMMARY**

Reference: WP 3-753, Table 3, Line 34

| | |
|---|---|
| TITLE: | L-131_1 TEST 4.41MI MP 42.35-57.47 PH1 |
| ORDER NO: | P.03752 |
| PSRS NO. | 24699 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **3,559** | **0** | **0** | **0** |

**DESCRIPTION**: Hydrotest 4.41 miles of pipeline L-131 between MP 42.35 and MP 57.47. The total number of segments to be hydrotested is 33.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 0 | 0 | 133 | 23,144 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 7 segment(s) totaling 11,420 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.

In addition, 26 segment(s) totaling 11,857 feet of pipe that has a documented strength test is included in this project for construction efficiency.



SB_GT&S_0675605

# Pacific Gas and Electric Company
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## PROJECT SUMMARY

Reference: WP 3-753, Table 3, Line 35

| | |
|---|---|
| TITLE: | L-131_2 TEST 4.02MI MP 8.44-45.90 PH1 |
| ORDER NO: | 41474018 |
| PSRS NO. | 23874 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2012 |
| AFUDC ELIGIBLE: | N/A |

### ESCALATED FINANCIAL EXPENDITURES (Expense)
### ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **2,680** | **0** | **0** |

**DESCRIPTION**: Hydrotest 4.02 miles of pipeline L-131 between MP 8.44 and MP 45.90. The total number of segments to be hydrotested is 11.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 3,637 | 0 | 17,593 | 0 |

**JUSTIFICATION:**

This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 172 fe et of pipe installed prior to 1960 operating above 30% SMYS with the potential for pipe fabrication threats and located within a Class Location 2-4 or HCA.
- 6 segment(s) totaling16,292 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 2 segment(s) totaling 4,670 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 2 segment(s) totaling 96 feet of pipe that has a documented strength test is included in this project for construction efficiency.



SB_GT&S_0675606

**Pacific Gas and Electric Company**
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**PROJECT SUMMARY**

Reference: WP 3-753, Table 3, Line 39

| | |
|---|---|
| TITLE: | L-132A TEST 1.46MI MP 0.01-1.46 PH1 |
| ORDER NO: | P.03761 |
| PSRS NO. | 23480 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **1,228** | **0** | **0** | **0** |

**DESCRIPTION**: Hydrotest 1.46 miles of pipeline L-132A between MP 0.01 and MP 1.46. The total number of segments to be hydrotested is 20.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 0 | 372 | 7,337 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 6 segment(s) totaling 4,199 feet of pipe installed prior to 1960 operating above 30% SMYS with the potential for pipe fabrication threats and located within a Class Location 2-4 or HCA.
- 2 segment(s) totaling 89 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 3 segment(s) totaling 372 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 9 segment(s) totaling 3,049 feet of pipe that has a document ed strength test is included in this project for construction efficiency.



SB_GT&S_0675607

# Pacific Gas and Electric Company
# Implementation Plan
# Workpapers Supporting Chapter 3, Pipeline Modernization

## PROJECT SUMMARY

Reference: WP 3-754, Table 3, Line 42

| | |
|---|---|
| TITLE: | L-138 TEST 17.09MI MP 22.04-45.56 PH1 |
| ORDER NO: | 41474080 |
| PSRS NO. | 23510 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2012 |
| AFUDC ELIGIBLE: | N/A |

### ESCALATED FINANCIAL EXPENDITURES (Expense)
### ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **5,841** | **0** | **0** |

**DESCRIPTION**: Hydrotest 17.09 miles of pipeline L-138 between MP 22.04 and MP 45.56. The total number of segments to be hydrotested is 35.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 2,763 | 87,468 | 0 | 0 |

**JUSTIFICATION:**

This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 15 segment(s) totaling 48,545 feet of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 4 segment(s) totaling 2,659 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 10 segment(s) totaling 36,151 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 6 segment(s) totaling 2,876 feet of pipe that has a documented strength test is included in this project for construction efficiency.



SB_GT&S_0675608

# Pacific Gas and Electric Company
# Implementation Plan
# Workpapers Supporting Chapter 3, Pipeline Modernization

## PROJECT SUMMARY

Reference: WP 3-754, Table 3, Line 45

| | |
|---|---|
| TITLE: | L-147 TEST 3.11MI MP 0.17-3.40 PH1 |
| ORDER NO: | P.03762 |
| PSRS NO. | 24548 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

## ESCALATED FINANCIAL EXPENDITURES (Expense)
## ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **2,491** | **0** | **0** | **0** |

**DESCRIPTION**: Hydrotest 3.11 miles of pipeline L-147 between MP 0.17 and MP 3.40. The total number of segments to be hydrotested is 29.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 0 | 7,352 | 9,046 | 0 |

**JUSTIFICATION:**

This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 734 fe et of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 9 segment(s) totaling 9,685 feet of pipe installed prior to 1960 operating above 30% SMYS with the potential for pipe fabrication threats and located within a Class Location 2-4 or HCA.
- 4 segment(s) totaling 1,712 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 1 segment(s) totaling 3 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 14 segment(s) totaling 4,264 feet of pipe that has a documented strength test is included in this project for construction efficiency.



SB_GT&S_0675609

**Pacific Gas and Electric Company**
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**PROJECT SUMMARY**

Reference: WP 3-754, Table 3, Line 60

| | |
|---|---|
| TITLE: | L-191 TEST 3.96MI MP 6.47-10.47 PH1 |
| ORDER NO: | P.03765 |
| PSRS NO. | 24555 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **2,415** | **0** | **0** | **0** |

**DESCRIPTION:** Hydrotest 3.96 miles of pipeline L-191 between MP 6.47 and MP 10.47. The total number of segments to be hydrotested is 9.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 0 | 0 | 20,916 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 20 feet of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 7 segment(s) totaling 20,778 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.

In addition, 1 segment(s) totaling 118 feet of pipe that has a documented strength test is included in this project for construction efficiency.



SB_GT&S_0675610

# Pacific Gas and Electric Company
# Implementation Plan
# Workpapers Supporting Chapter 3, Pipeline Modernization

## PROJECT SUMMARY

Reference: WP 3-754, Table 3, Line 72

| | |
|---|---|
| TITLE: | L-300A_1 TEST 58.46MI MP 0.29-502.24 PH1 |
| ORDER NO: | P.03754 |
| PSRS NO. | 24495 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

### ESCALATED FINANCIAL EXPENDITURES (Expense)
### ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **32,911** | **0** | **0** | **0** |

**DESCRIPTION:** Hydrotest 58.46 miles of pipeline L-300A between MP 0.29 and MP 502.24. The total number of segments to be hydrotested is 252.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 0 | 0 | 7,722 | 300,960 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 77 feet of pipe installed prior to 1970 operating above 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 78 segment(s) totaling 107,939 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 11 segment(s) totaling 39,701 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 162 segment(s) totaling 160,965 feet of pipe that has a documented strength test is included in this project for construction efficiency.



SB_GT&S_0675611

# Pacific Gas and Electric Company
# Implementation Plan
# Workpapers Supporting Chapter 3, Pipeline Modernization

## PROJECT SUMMARY

Reference: WP 3-754, Table 3, Line 73

| | |
|---|---|
| TITLE: | L-300A_2 TEST 21.67MI MP 230.32-490.59 PH1 |
| ORDER NO: | 41474039 |
| PSRS NO. | 23497 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2012 |
| AFUDC ELIGIBLE: | N/A |

### ESCALATED FINANCIAL EXPENDITURES (Expense)
### ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **11,359** | **0** | **0** |

**DESCRIPTION:** Hydrotest 21.67 miles of pipeline L-300A between MP 230.32 and MP 490.59. The total number of segments to be hydrotested is 88.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 0 | 0 | 0 | 114,406 |

**JUSTIFICATION:**

This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 40 segment(s) totaling 78,428 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 17 segment(s) totaling 23,745 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 31 segment(s) totaling 12,233 feet of pipe that has a documented strength test is included in this project for construction efficiency.

Included in this project is 426 feet of pipe that was installed after 1970, and PG&E has not been able to confirm complete strength test documentation. The cost to strength test the post-1970 pipe is forecasted to be $42,000 and is NOT included in the cost forecast for this project. The costs associated with strength tes ting post-70 pipe without a verifi ed strength test will be charged to a separate order for which incremental cost recovery is not being requested.



SB_GT&S_0675612

**Pacific Gas and Electric Company**
**Implementation Plan**
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## PROJECT SUMMARY

Reference: WP 3-754, Table 3, Line 75

| | |
|---|---|
| TITLE: | L-300B_1 TEST 59.49MI MP 0.00-502.64 PH1 |
| ORDER NO: | P.03756 |
| PSRS NO. | 24521 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/1/2011 |
| AFUDC ELIGIBLE: | N/A |

### ESCALATED FINANCIAL EXPENDITURES (Expense) ($000)

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **24,871** | **0** | **0** | **0** |

**DESCRIPTION:** Hydrotest 59.49 miles of pipeline L-300B between MP 0.00 and MP 502.64. The total number of segments to be hydrotested is 213.

Footage per pipe diameter

| 12" and less | 14" to 20" | 22" to 28" | 30" to 42" |
|---|---|---|---|
| 0 | 0 | 11 | 314,073 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 69 segment(s) totaling 105,040 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.
- 23 segment(s) totaling 30,060 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.

In addition, 121 segment(s) totaling 178,984 feet of pipe that has a documented strength test is included in this project for construction efficiency.

Included in this project is 987 feet of pipe that was installed after 1970, and PG&E has not been able to confirm complete strength test documentation. The cost to strength test the post-1970 pipe is forecasted to be $78,000 and is NOT included in the cost forecast for this project. The costs associated with strength testing post-70 pipe without a verified strength test will be charged to a separate order for which incremental cost recovery is not being requested.



SB_GT&S_0675613

**Pacific Gas and Electric Company**
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**PROJECT SUMMARY**

Reference: WP 3-755, Table 3, Line 91

| | |
|---|---|
| TITLE: | DFM-0213-02 TEST 0.90MI MP 0.00-0.94 PH1 |
| ORDER NO: | 41473985 |
| PSRS NO. | 23927 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 7/1/2014 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **0** | **0** | **981** |

**DESCRIPTION:** Hydrotest 0.90 miles of pipeline DFM-0213-02 between MP 0.00 and MP 0.94. The total number of segments to be hydrotested is 5.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 4,748 | 0 | 0 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 3 segment(s) totaling 154 feet of pipe installed prior to 1970 operating below 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 2 segment(s) totaling 4,594 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.



SB_GT&S_0675614

**Pacific Gas and Electric Company**
**Implementation Plan**
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**PROJECT SUMMARY**

Reference: WP 3-755, Table 3, Line 104

| | |
|---|---|
| TITLE: | DFM-0611-05 TEST 0.12MI MP 0.00-0.12 PH1 |
| ORDER NO: | 41482853 |
| PSRS NO. | 24196 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 7/1/2012 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **909** | **0** | **0** |

**DESCRIPTION**: Hydrotest 0.12 miles of pipeline DFM-0611-05 between MP 0.00 and MP 0.12. The total number of segments to be hydrotested is 2.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 293 | 346 | 0 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 293 feet of pipe installed prior to 1970 operating below 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 1 segment(s) totaling 346 feet of pipe operating above 30% SMYS within a Class Location 2-4 or HCA.



SB_GT&S_0675615

**Pacific Gas and Electric Company**
**Implementation Plan**
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**PROJECT SUMMARY**

Reference: WP 3-756, Table 3, Line 139

| | |
|---|---|
| TITLE: | DFM-1622-01 TEST 0.99MI MP 0.00-1.00 PH1 |
| ORDER NO: | 41474008 |
| PSRS NO. | 23860 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 7/1/2014 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **0** | **0** | **0** | **998** |

**DESCRIPTION:** Hydrotest 0.99 miles of pipeline DFM-1622-01 between MP 0.00 and MP 1.00. The number of segments to be hydrotested is 7.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 5,242 | 0 | 0 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 1 segment(s) totaling 18 feet of pipe installed prior to 1970 operating below 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 6 segment(s) totaling 5,224 feet of pipe that would have been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.



SB_GT&S_0675616

**Pacific Gas and Electric Company**
**Implementation Plan**
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**PROJECT SUMMARY**

Reference: WP 3-756, Table 3, Line 144

| | |
|---|---|
| TITLE: | DFM-1816-01_1 TEST 9.38MI MP 0.00-8.44 PH1 |
| ORDER NO: | P.03751 |
| PSRS NO. | 24484 |
| MAT CODE: | KE1 |
| OPERATIVE DATE: | 12/31/2011 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | **2,631** | **0** | **0** | **0** |

**DESCRIPTION:** Hydrotest 9.38 miles of pipeline DFM-1816-01 between MP 0.00 and MP 8.44. The total number of segments to be hydrotested is 34.

Footage per pipe diameter

| 12″ and less | 14″ to 20″ | 22″ to 28″ | 30″ to 42″ |
|---|---|---|---|
| 49,543 | 0 | 0 | 0 |

**JUSTIFICATION:**
This Phase 1 project is driven by the results of PG&E's Pipeline Decision Tree. The segment(s) below have not been strength tested to 1.25 x MAOP for class 1 and 2 pipelines or 1.5 x MAOP for class 3 and 4 pipelines and include:

- 4 segment(s) totaling 26,824 feet of pipe installed prior to 1970 operating above 30% SMYS with the potenti al for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 2 segment(s) totaling 1,326 feet of pipe installed prior to 1970 operating below 30% SMYS with the potential for pipe manufacturing threats and located within a Class Location 2-4 or HCA.
- 9 segment(s) totaling 3,654 feet of pipe that would ha ve been strength tested or replaced in Phase 2 (starting in 2015), but was included in this Phase 1 project due to proximity and economics.



SB_GT&S_0675617

**Pacific Gas and Electric Company**
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**EXPENSE PROJECT SUMMARY**

Reference: WP 3-757, Table 3, Line 173

| | |
|---|---|
| TITLE: | L132 MP 31.7-38.4 ILI & Analysis PH1 |
| ORDER NO: | 41482737 |
| PSRS NO. | 24026 |
| MAT Code: | KE3 |
| OPERATIVE DATE: | 11/1/2013 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | 0 | 0 | 325 | 499 |

## DESCRIPTION

This project will clean and inspect with a Magnetic Flux Leakage (MFL) inspection tool, 7.48 miles of upgraded 30-36 inch pipeline. Based on the results of the inspection, the pipeline may be exposed at certain locations in order to perform verification. Minor repairs will be made to the pipeline if necessary. A new capital order will be created if pipe replacement or recoating is required.

## JUSTIFICATION

The work is being performed to inspect the pipeline with a MFL tool. The objective for inspecting the pipeline is to assess the condition of the pipeline, which provides critical gas transportation in the BayArea. The pipeline is 1948-1995 vintages, which includes 2.86 miles located in High Consequence Areas (HCAs). Information gained from the MFL tool will identify any critical and sub-critical pipeline anomalies. ILI data is valuable input into the Engineering Condition Assessment process PG&E will use to identify and mitigate ground movement threats, and to identify and remove excessive pups, miter bend and wrinkle bends.



SB_GT&S_0675618

**Pacific Gas and Electric Company**
**Implementation Plan**
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**EXPENSE PROJECT SUMMARY**

Reference: WP 3-757, Table 3, Line 175

| | |
|---|---|
| TITLE: | L300A MP 352.2-391.2 ILI & Analysis PH1 |
| ORDER NO: | 41482736 |
| PSRS NO. | 24022 |
| MAT Code: | KE3 |
| OPERATIVE DATE: | 11/1/2013 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | 0 | 0 | 500 | 788 |

## DESCRIPTION

This project will clean and inspect with a Magnetic Flux Leakage (MFL) inspection tool, 38.96 miles of upgraded 34-36 inch Pipeline. Basedon the results of the inspection, the pipeline may be exposed at certain locations in order to perform verification. Minor repairs will be made to the pipeline if necessary. A new capital order will be created if pipe replacement or recoating is required.

## JUSTIFICATION

The work is being performed to inspect the pipeline with a MFL tool. The objective for inspecting the pipeline is to assess the condition of the pipeline, which provides critical gas transportation to the Bay Area. The pipeline is 1950-1997 vintages, which includes 2.63 miles located in High Consequence Areas (HCAs). Information gained from the MFL tool will identify any critical and sub-critical pipeline anomalies. ILI data is valuable input into the Engineering Condition Assessment process PG&E will use to identify and mitigate ground movement threats, and to identify and remove excessive pups, miter bend and wrinkle bends.



SB_GT&S_0675619

**Pacific Gas and Electric Company**
**Implementation Plan**
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**EXPENSE PROJECT SUMMARY**

Reference: WP 3-757, Table 3, Line 176

| | |
|---|---|
| TITLE: | L300B MP 299.0-351.8 ILI & Analysis PH1 |
| ORDER NO: | 41482735 |
| PSRS NO. | 24018 |
| MAT Code: | KE3 |
| OPERATIVE DATE: | 11/1/2014 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | 0 | 0 | 0 | 1,326 |

## DESCRIPTION

This project will clean and inspect with a Magnetic Flux Leakage (MFL) inspection tool, 52.79 miles of upgraded 34 inch Pipeline. Based on the results of the inspection, the pipeline may be exposed at certain locations in order to perform verification. Minor repairs will be made to the pipeline if necessary. A new capital order will be created if pipe replacement or recoating is required.

## JUSTIFICATION

The work is being performed to inspect the pipeline with a MFL tool. The objective for inspecting the pipeline is to assessthe condition of the pipeline, which provides critical gas transportation to the BayArea. Thepipeline is 1950-1971 vintages. Information gained from the MFL tool will identify any critical and sub-critical pipeline anomalies. ILI data is valuable input into the Engineering Condition Assessment process PG&E will use to identify and mitigate ground movement threats, and to identify and remove excessive pups, miter bend and wrinkle bends.



SB_GT&S_0675620

**Pacific Gas and Electric Company**
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**EXPENSE PROJECT SUMMARY**

Reference: WP 3-757, Table 3, Line 177

| | |
|---|---|
| TITLE: | L300B MP 351.8-390.9 ILI & Analysis PH1 |
| ORDER NO: | 41482734 |
| PSRS NO. | 24015 |
| MAT Code: | KE3 |
| OPERATIVE DATE: | 11/1/2013 |
| AFUDC ELIGIBLE: | N/A |

**ESCALATED FINANCIAL EXPENDITURES (Expense)**
**($000)**

| | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|
| Total Expenditures: | 0 | 0 | 600 | 688 |

## DESCRIPTION

This project will clean and inspect with a Magnetic Flux Leakage (MFL) inspection tool, 39.38 miles of upgraded 34-36 inch Pipeline. Based on the results of the inspection, the pipeline may be exposed at certain locations in order to perform verification. Minor repairs will be made to the pipeline if necessary. A new capital order will be created if pipe replacement or recoating is required.

## JUSTIFICATION

The work is being performed to inspect the pipeline with a MFL tool. The objective for inspecting the pipeline is to assess the condition of the pipeline, which provides critical gas transportation to the Bay Area. The pipeline is 1950vintage, which includes 1.34 miles located in High Consequence Areas (HCAs). Information gained from the MFL tool will identify any critical and sub-critical pipeline anomalies. ILI data is valuable input into the Engineering Condition Assessment process PG&E will use to identify and mitigate ground movement threats, and to identify and remove excessive pups, miter bend and wrinkle bends.



SB_GT&S_0675621

**Pacific Gas and Electric Company**
**Implementation Plan**
**Workpapers Supporting Chapter 3, Pipeline Modernization**

The following correction applies to the second to last line on the Project Cost workpapers associated with Strength Testing projects. The specific workpaper pages are identified below. The text in the accompanying Project Summaries in each case correctly states that the cost of strength testing post-70 pipe without a verified strength test will be charged to a separate order for which incremental cost recovery is not being requested.

ORIGINAL:
"cost of **replacing** post-70 pipe without verifiable strength test"

REVISED:
"cost of **strength testing** post-70 pipe without verifiable strength test"

THIS CORRECTION APPLIES TO THE FOLLOWING WORKPAPERS:

| | | | | |
|---|---|---|---|---|
| WP 3-759 | WP 3-798 | WP 3-839 | WP 3-884 | WP 3-927 |
| WP 3-762 | WP 3-801 | WP 3-842 | WP 3-888 | WP 3-930 |
| WP 3-765 | WP 3-804 | WP 3-845 | WP 3-892 | WP 3-933 |
| WP 3-768 | WP 3-807 | WP 3-848 | WP 3-895 | WP 3-936 |
| WP 3-771 | WP 3-810 | WP 3-851 | WP 3-898 | WP 3-939 |
| WP 3-774 | WP 3-813 | WP 3-854 | WP 3-901 | WP 3-943 |
| WP 3-777 | WP 3-816 | WP 3-857 | WP 3-904 | WP 3-946 |
| WP 3-780 | WP 3-819 | WP 3-860 | WP 3-908 | WP 3-949 |
| WP 3-783 | WP 3-822 | WP 3-864 | WP 3-912 | WP 3-952 |
| WP 3-786 | WP 3-825 | WP 3-871 | WP 3-915 | WP 3-955 |
| WP 3-789 | WP 3-828 | WP 3-874 | WP 3-918 | WP 3-958 |
| WP 3-792 | WP 3-831 | WP 3-877 | WP 3-921 | WP 3-961 |
| WP 3-795 | WP 3-835 | WP 3-880 | WP 3-924 | WP 3-964 |



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THIS CORRECTION APPLIES TO THE FOLLOWING WORKPAPERS (continued):

| | | | |
|---|---|---|---|
| WP 3-967 | WP 3-1050 | WP 3-1127 | WP 3-1203 |
| WP 3-970 | WP 3-1053 | WP 3-1130 | WP 3-1207 |
| WP 3-973 | WP 3-1057 | WP 3-1133 | WP 3-1210 |
| WP 3-976 | WP 3-1060 | WP 3-1136 | WP 3-1213 |
| WP 3-980 | WP 3-1063 | WP 3-1139 | WP 3-1216 |
| WP 3-986 | WP 3-1066 | WP 3-1142 | WP 3-1219 |
| WP 3-990 | WP 3-1069 | WP 3-1145 | WP 3-1222 |
| WP 3-993 | WP 3-1072 | WP 3-1148 | WP 3-1225 |
| WP 3-999 | WP 3-1075 | WP 3-1151 | WP 3-1228 |
| WP 3-1002 | WP 3-1078 | WP 3-1154 | WP 3-1231 |
| WP 3-1005 | WP 3-1082 | WP 3-1157 | WP 3-1234 |
| WP 3-1008 | WP 3-1085 | WP 3-1160 | WP 3-1237 |
| WP 3-1011 | WP 3-1088 | WP 3-1163 | WP 3-1240 |
| WP 3-1014 | WP 3-1091 | WP 3-1166 | WP 3-1243 |
| WP 3-1017 | WP 3-1094 | WP 3-1169 | WP 3-1246 |
| WP 3-1020 | WP 3-1097 | WP 3-1172 | WP 3-1249 |
| WP 3-1023 | WP 3-1100 | WP 3-1175 | WP 3-1253 |
| WP 3-1026 | WP 3-1103 | WP 3-1178 | WP 3-1257 |
| WP 3-1029 | WP 3-1106 | WP 3-1181 | WP 3-1260 |
| WP 3-1032 | WP 3-1109 | WP 3-1185 | WP 3-1263 |
| WP 3-1035 | WP 3-1112 | WP 3-1188 | WP 3-1266 |
| WP 3-1038 | WP 3-1115 | WP 3-1191 | WP 3-1269 |
| WP 3-1041 | WP 3-1118 | WP 3-1194 | WP 3-1272 |
| WP 3-1044 | WP 3-1121 | WP 3-1197 | WP 3-1275 |
| WP 3-1047 | WP 3-1124 | WP 3-1200 | WP 3-1278 |



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