BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion to Adopt New Safety and Reliability Regulations for Natural Gas Transmission and Distribution Pipelines and Related Ratemaking Mechanisms

Rulemaking 11-02-019 (Filed February 24, 2011)

PACIFIC GAS AND ELECTRIC COMPANY'S PIPELINE SAFETY ENHANCEMENT PLAN (PSEP) COMPLIANCE REPORT

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Dated: April 30, 2013

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I. INTRODUCTION

Pursuant to Ordering Paragraph 10 of Decision 12-12-030, attached is PG&E's PSEP

Quarterly Compliance Report, for the reporting period April 1, 2011 through March 31, 2013.

Respectfully Submitted,

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PIPELINE SAFETY ENHANCEMENT PLAN (PSEP) COMPLIANCE REPORT

NO. 2013-01

REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

IN COMPLIANCE WITHCPUC DECISION 12-12-030

SUBMITTED APRIL 30,2013



PACIFIC GAS AND ELECTRIC COMPANY PIPELINE SAFETY ENHANCEMENT PLAN (PSEP) COMPLIANCE REPORT NO. 2013-01 REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013 IN COMPLIANCE WITH CPUC DECISION 12-12-030 SUBMITTED APRIL 30, 2013

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PACIFIC GAS AND ELECTRIC COMPANY PIPELINE SAFETY ENHANCEMENT PLAN (PSEP) COMPLIANCE REPORT NO. 2013-01 IN COMPLIANCE WITH CPUC DECISION 12-12-030

Introduction and Background

In response to the California Public Utilities Commission's (CPUC or Commission) order in Rulemaking 11-02-019, Pacific Gas and Electric (PG&E) filed its Pipeline Safety Enhancement Plan (PSEP or Implementation Plan) on August 26, 2011 with the goal of enhancing safety and improving operations. Subsequently, the Commission issued Decision 12-12-030 on December 28, 2012. Ordering Paragraph (OP) 10 of that decision directs PG&E to file and serve quarterly compliance reports to keep the CPUC and the public informed of PG&E's progress and actual cost experience related to the Implementation Plan. Per OP 10, the PSEP Compliance Reports are to be submitted in compliance with instructions set forth in Attachment D of the decision, which is separated into 29 specific requirements.

PSEP Compliance Report No. 2013-01¹ is submitted in compliance with the instructions set forth in Attachment D and reflects the reporting period April 1, 2011 through March 31, 2013. It is being served on the directors of the Commission's Energy Division (ED) and the Safety and Enforcement Division (SED) (formerly the Consumer Protection and Safety Division), and to the service list in the PSEP proceeding (R.11-02-019). It will also be posted on the PG&E website at http://apps.pge.com/regulation/.² Each subsequent report shall cover the preceding three months and will be served no later than 30 days after the conclusion of each calendar guarter.³

¹ This report is labeled "No. 2013-01," to designate that it covers the reporting period ending the first quarter of 2013. Subsequent report submissions will follow this nomenclature (i.e., No. 2013-02 will cover the second quarter of 2013, etc.).

² Click on "Search" under Public Case Documents. Select "Gas Pipeline Safety OIR" from the "Case:" dropdown menu. Select filing date of 04/30/13 to narrow the search criteria. Then click Search. Report filename is "01_GasPipelineSafetyOIR_Other-Doc_PGE_20130430_PSEP Qrtly Compliance Report.docm."

³ D.12-12-030, Attachment D, p. D1.

Summary

PG&E has demonstrated its commitment to rigorous natural gas safety standards, improved operations and better service to its customers and the public by investing more than \$1 billion since April 1, 2011 to enhance the safety of its gas transmission pipeline infrastructure through our transmission integrity management programs, including PSEP. The majority of this work was undertaken in advance of Commission approval and at shareholder expense. Some of the key accomplishments as of March 31, 2013 resulting from these investments and efforts include:

- Completing over 435 miles of strength testing;⁴
- Replacing 45 miles of pipeline;5
- Upgrading 78 miles of pipeline to accept in-line inspection technology; and
- Automating 67 valves.

In addition, PG&E has focused on needed improvements identified by the National Transportation Safety Board (NTSB) relating to its corporate culture, Integrity Management, and pipeline operations. To date, PG&E has addressed and received NTSB approval to close seven of the 12 NTSB recommendations⁶ with the status of the 5 remaining recommendations being currently deemed as "open—acceptable pending completion."⁷

Following the framework set out by the Commission in Attachment D of Decision 12-12-030, in this report PG&E describes the progress it has made on the PSEP and provides insight into how the PSEP activities relate to the work scope outlined in PG&E's Implementation Plan filing. As the Commission recognized in Decision 12-12-030:

Although PG&E has presented sufficient detail of its specific projects currently expected to be performed, substantial amounts of new data on in-service pipeline will be brought to light by the unprecedented number of pressure tests and pipeline

⁴ Pipeline mileage for which new strength tests have been completed as well as mileage for which records of prior strength tests have been identified and validated as meeting the traceable, verifiable and complete standard.

⁵ Pipeline mileage for which construction activities have been completed ('backfilled').

March 13, 2012 NTSB Letter to PG&E classified P-10-2 as "Closed—Acceptable Action." August 29, 2012 NTSB Letter to PG&E classified P-11-3, P-11-25, and P-11-28 as "Closed— Acceptable Action."
 March 14, 2013 NTSB Letter to PG&E classified P-10-3, P-11-24, and P-11-31 as "Closed—

March 14, 2013 NTSB Letter to PG&E classified P-10-3, P-11-24, and P-11-31 as "Closed– Acceptable Action."

⁷ P-10-4, P-11-26, P-11-27, P-11-29, and P-11-30.

replacement construction that will be performed in the upcoming years." (D.12-12-030, p. 86).

As PG&E has moved forward with the execution of its PSEP subsequent to the time of the Implementation Plan filing, it has naturally progressed project definition and design, incorporating the results of strength testing, further asset documentation identification and review and more project-specific information. This has allowed PG&E to progress from the preliminary work scope and associated estimates and work plans included in its Implementation Plan filing to more specific work plans, refined estimates and schedules, consistent with the normal progression of capital project design and development.

Considering the above discussion, this report describes PG&E's performance on PSEP activities, how risks originally identified in the filing have influenced the actions taken on a project-by-project basis, and how PSEP program management activities have enabled and provided assurance regarding completion of work in compliance with PG&E's safety and quality standards.

Having completed and returned to operations 227 PSEP projects to date, PG&E has consistently sought to expediently and efficiently execute project activities throughout PG&E's service area by:

- Engaging customers and local communities with over 505,000 phone calls, 228,000 customer mailings, and 70 open house meetings to increase public awareness of project operations;
- Establishing a competitive Alliance partnership with qualified construction contractors;
- Developing, executing and monitoring project plans that put the safety of public, contractors, and employees first;
- Monitoring the quality of all critical work performed by employees and contractors;
- Updating the prioritization and scheduling of work based upon changes in pipeline information from the results of the Pipeline Records Integration Program;⁸ and

⁸ The Pipeline Records Integration Program consists of Maximum Allowable Operating Pressure (MAOP) validation work and the Gas Transmission Asset Management (GTAM) Project (now referred to as the Mariner Project).

 Identifying improvements to existing procedures and work alignment and applying these changes consistently across the program to increase the Program's capability to meet schedule and cost commitments.

This report demonstrates the progress PG&E has made in executing its Implementation Plan while recognizing that significant elements of the PSEP scope, particularly within pipeline replacement, pressure testing and valve automation, remain to be completed through 2014. Many of the risks that PG&E identified in its contingency estimate have materialized and, in spite of all mitigation efforts, have driven significant upward cost variances into both individual projects and workstreams.

Given the naturally evolving project scope and design development associated with PG&E's continuing efforts on PSEP, this first report compares PG&E's incurred costs to adopted amounts at a program level to provide a meaningful, consistent comparison. PG&E will quantify the total costs paid by PG&E's shareholders for work at the project level after it has completed an Update Application⁹ to be filed later this year. This will enable PG&E to perform a comprehensive, summary level reconciliation between the amounts adopted by the Commission in Decision 12-12-030 for anticipated work efforts and the incurred program costs.

Table 1, below, provides a summary of the PSEP activities and actual costs for the period April 1, 2011 to March 31, 2013.

^{9 &}quot;Pacific Gas and Electric Company must file an application within 30 days after the completion of its Maximum Allowable Operating Pressure validation and records search to present the results of those efforts and update its Implementation Plan authorized revenue requirements and related budgets, consistent with this decision." (Decision 12-12-030, OP 11.)

TABLE 1 PACIFIC GAS AND ELECTRIC COMPANY SUMMARY OF PSEP ACTIVITIES AND ACTUAL COSTS

PSEP Workstream	PSEP Filing Estimate ^{(a)(b)} (\$ in millions)	Approved Scope (Miles/Valves)	Actual Costs 4/1/11 – 3/31/13 (\$ in millions)	Completed Scope 4/1/11 – 3/31/13 (Miles/Valves)
Pipeline Modernization				
Pipeline Replacement	\$838.5	185.5	\$286.1	45
Strength Testing	452.6	783	388.4	435
In-Line Inspections (ILI) / Upgrades	40.0	234 / 199	28.2	78
Subtotal	\$1,331.0		\$702.6	
Valve Automation	143.6	228	47.1	67
Pipeline Records Integration	286.0	n/a	277.7	n/a
Interim Safety Enhancement Measures	3.2	n/a	2.9	n/a
Program Management Office (PMO) and Other ^(c)	34.8	n/a	37.9	n/a
Total	\$1,798.6		\$1,068.3	

(a) Excludes Stanpac and contingency amounts.

(b) Dollars represent PG&Es filed PSEP request. Decision 12-12-030 did not authorize rate recovery for the Pipeline Records Integration Program or contingency. PG&E's Update Application to be filed later this year in compliance with Ordering Paragraph 11 of D.12-12-030 will provide an additional level of segment detail that supports the data provided in this project-level report.

(c) Other includes costs of activities not directly associated with an individual workstream.

Decision-Making Process

1. Project Planning and Prioritization of Work

Describe PG&E's project planning process including how the projects were and are being scheduled and sequenced and what measures were and are being taken to conduct the work in a cost effective manner.

Response

The process by which PSEP projects were and continue to be scheduled and sequenced is consistent with the work prioritization and scheduling process outlined in the testimony supporting PG&E's August 26, 2011 Implementation Plan.¹⁰ As outlined in that testimony, the PSEP Pipeline Modernization Program Decision Trees were constructed to provide a high level prioritization with the use of phases. Phase 1 of the Pipeline Modernization Program started in 2011 and will continue through December 31, 2014. This phase primarily focuses on pipeline segments that are operating in High Consequence Areas (HCA) without a documented strength test.

Pipeline work was further prioritized by work type (pipe replacement, and strength testing) by considering population density to a particular pipe segment (specifically by using class location and HCA footage per project), the highest Potential Impact Radius (PIR)¹¹ of any segment per project, and PG&E's ability to provide a margin of safety. Projects were then prioritized based on the following hierarchy factored prioritization system:

- <u>First</u> descending order of class location: Class 4 to Class 1 (the highest class location pipe segment within a unique project).
- <u>Second</u> Decreasing PIR (highest to lowest), broken out into four tier groups: top 25 percent of PIR work started first, second set of 25 percent of PIR work started second, etc.
- <u>Third</u> Percentage of HCA pipe (HCA footage/total footage) within each project from highest to lowest.

¹⁰ PG&E PSEP Implementation Plan (R.11-02-019) Prepared Testimony, Chapter 3 – Gas Transmission Pipeline Modernization Program, Section A.5, page 3-33, Work Prioritization and Scheduling.

¹¹ PIR is defined by the radius of a circle within which the potential failure of a pipeline could have significant impact on people or property. PIR is a calculated value based on pipeline diameter and pressure to represent the energy contained in the pipeline.

This prioritization system served as the basis for developing the annual project schedules included in our August 2011 Implementation Plan filing.

As anticipated in our testimony, the scheduling and sequencing of projects has been subject to change based on the following:

- (1) Ongoing assessment of the margin of safety for the pipeline as pipeline information is updated via records validation using the prioritization criteria above, including interim safety enhancement measures and normal operating conditions, to ensure that public safety is the primary driver for scheduling project work.
- (2) The existence of a significant safety component in re-establishing operating pressures where pressure reductions would require curtailments of critical gas service.
- (3) Permitting restrictions or delays.
- (4) The need to maintain customer service and minimize customer impact (outages).
- (5) Coordination of Phase 1 Pipeline Modernization Program projects with other Phase 1 work or other gas transmission pipeline work and maintenance to ensure efficient use of resources and cost-effective project execution, and minimize overall gas system impacts.

Also outlined in PG&E's August 26, 2011 testimony, the PSEP Valve Automation Program Decision Trees were constructed to provide a high level prioritization with the use of phases as well by determining the installation of automated valves on pipeline segments based on population density (i.e., class location, presence of HCAs, and the PIR of the pipeline) and criteria for earthquake fault crossings. Phase 1 of the Valve Automation Program started in 2011 and will continue through December 31, 2014. This phase primarily focuses on line segments that have a sustained length of HCA pipe within a Class 3 location with a PIR of three hundred feet (300') or greater or is within a Class 4 with a PIR of one hundred feet (100') or greater.

The Valve Automation Program also includes the ability to modify plans and the prioritization of work. Potential causes of such changes include changes to pipeline segment classification, e.g., class location and HCA, the adjustment of valves required upon completing of detailed engineering, and changes required to effectively and efficiently manage the program in a coordinated manner with other work, including the Pipeline Modernization Program and the Gas Transmission and Storage (GT&S) rate case.

During 2012 and on an ongoing basis, the project planning process has incorporated significant scope and schedule changes driven by the validation of pipe segment attribute data, changes in integrity management assessments, and commitments to maintain ongoing public safety. The PSEP project construction schedule reflects the consolidated output of the planning and prioritization process described above.

To ensure that these projects were conducted in a cost-effective manner, PG&E took a coordinated approach to the management of project scope, schedules, resources and risks. This approach increased the capability to communicate issues and responses immediately, and provided a continuous focus upon individual project activities and upcoming milestones. In addition, at a workstream-level, program managers focused on implementing consistent process improvements to improve project delivery across workstreams. Details on many of these improvements are provided in response to Questions 6, 17 and 18 in this report.

Resource Procurement and Oversight

2. Resource Planning

Explain how PG&E decided whether to do the work in-house (e.g., use own employees and equipment) or contract the work out to other parties.

Response

To ensure that Implementation Plan work is completed on a timely basis, PG&E has implemented a model whereby the skills and experience of existing employees are augmented by contractor resources. PG&E also uses contractor resources where it has identified the need to efficiently leverage new skills or equipment within an accelerated or an uncertain timeframe. Where it has identified that these resources are important to the ongoing success of the Program or its gas system operations, PG&E is in the process of training existing, or hiring additional, employees.

Central to the adoption of this strategy was the scope and timeline inherent in the CPUC Decision 11-06-017 to commence Implementation Plan activities and the significant scope of the work identified in PG&E's Implementation Plan. PG&E's August 2011 PSEP filing itself leveraged significant support from contractor resources (e.g., engineering and construction estimators) and fully anticipated that a significant level of contractor support would be required to execute the Program. PG&E indicated in its testimony that much of the work identified in the Implementation Plan was considered to be in addition to current activities and in response to the implementation of new industry standards. As such, the use of contractor resources was an intrinsic element in how PG&E formulated and proposed to execute the Implementation Plan.

Finally, in engaging third-party contractors, PG&E is aware that their actions are central to the success of the Program. PG&E requires that retained contractors provide appropriately trained staff and deliver work in compliance with PG&E standards, while taking all actions consistent with maintaining the safety of the public and employees.

3. Contractor Selection Process

For work contracted out to other parties, what criteria did PG&E use to select the contractors and did PG&E use a competitive bidding process to select the contractor(s)? If not, explain why.

Response

The majority of Implementation Plan contracts to date are with existing PG&E suppliers that had existing Master Service Agreements (MSA) that were previously subject to competitive bidding. The supplier MSA governs the terms and conditions that apply to all work performed by the supplier. Project work scopes and details are subsequently agreed upon using Contract Work Authorizations (CWA), the majority of which under the PSEP Implementation Plan PG&E has awarded to suppliers via competitive bidding processes.

PG&E has also added additional suppliers to execute the Implementation Plan, and has completed the required due diligence and supplier qualification process. Though not an exhaustive list, and each item may not be applicable to each work activity performed, this process evaluates the extent to which a prospective supplier:

- Has adequate company size, facilities, and equipment, with experienced management and technical personnel for the type of proposed work.
- Has current required license(s), certificates or permits for the proposed work, or a willingness to obtain necessary permits and certificates.
- Has good reputation, product knowledge, and experience, especially performing jobs of the type and size requested.
- Has been in business for at least three years, or key personnel have equivalent experience from another firm.
- Has performed work for a similar company, either as a prime contractor or a subcontractor, and performance was acceptable.
- Has special technology, expertise, equipment, or tools, if required, for the proposed work.
- Is able to deliver materials and/or services in appropriate geographic area of operations.

- Has the financial resources to complete the work, and if available, has submitted an audited financial statement or an annual report to verify financial resources.
- Has bonding capacity equal to or greater than the proposed job size (required only for certain construction-related projects).
- Has or can obtain insurance coverage in the types and amounts required for the proposed work; and
- Has references to evaluate a potential supplier's capabilities.

PG&E policy requires goods and services to be competitively bid if the aggregate or planned contract award is \$100,000 or greater. This policy includes a direct award exception in certain circumstances where it is not feasible to use a competitive bidding process. Circumstances where this exception applies include, but may not be limited to:

- Limited supplier base for proprietary equipment, processes, or highly specialized technical requirements;
- CPUC mandated supplier;
- Work that has already begun;
- Emergencies or Natural Disaster;
- Work mandated to be completed in a certain timeframe; and
- Other mandates

In certain instances, PG&E has awarded work directly to a qualified supplier who was selected due to an existing proven track record with PG&E, where feasible. Specific examples where PG&E has direct awarded Implementation Plan work include instances where current similar work is already being completed by an existing contractor (cost efficiency) and where significant acceleration of work schedules based upon work prioritization has occurred.

In 2013, PG&E has begun implementing an Alliance Construction Contractor delivery model having completed a comprehensive screening and selection process of qualified contractors. The primary objectives of this strategy include the establishment of best-in-class safety performance, a robust construction delivery model, and the maintenance of a qualified/skilled workforce to perform work planned in 2013 and the future. Having selected the four alliance contractors and assigned to them construction regions in the first quarter of 2013, this delivery model will also seek to increase the Program's ability to meet cost, schedule and construction commitments.

4. Quality – Outside Contractors

How does PG&E monitor the quality of work performed by outside contractors? Has PG&E found any instances where a contractor failed to do the work properly? If so, what actions did PG&E take in response?

Response

PG&E's contracts require contractors to follow the same PG&E standards followed by internal resources consistently, and holds contractors accountable for instances where such standards have not been followed.

The PSEP PMO structure and procedures incorporate PG&E procedures that monitor contractor compliance with these contractual quality commitments and check the quality of work performed from two perspectives. The first involves oversight within each line of business to ensure individual process quality and ensure compliance with PG&E standards. For example, construction inspection procedures follow PG&E's inspection standards and involve the checking of field construction activities using a Quality Control (QC) manual to ensure proper procedures are followed and the appropriate forms are completed. Given the scope of PSEP construction activities much of this work may itself be performed by third-party contractors and partially for this reason and more importantly to provide additional Quality Assurance (QA) that PG&E procedures are being followed and that work is consistently being performed to PG&E standards. additional guality procedures are undertaken by staff not linked to the performance of the original work. This second area of responsibility is conducted on a randomized basis to support analysis and involves assessments that document the performance of reviews that check adherence to PG&E standards and the completion of required work process forms. These random assessment activities on PSEP construction projects include, but are not limited to, areas such as trenching, backfill and compaction, water discharge plan compliance, test plan compliance, inspector qualification, welder qualification and compliance with weld procedures, weld repair rates, pipeline surface prep and field-applied coating application. The results of these quality monitoring processes are documented and used to measure the level of quality and provide feedback to PG&E and our contractors on issues discovered. In addition to communicating these issues back to the contractor, PG&E has implemented a formal corrective action

program. This program is used to address internal process, material and systemic issues that are discovered.

PG&E has found instances where the contractor did not perform quality work and has taken specific actions to maintain the integrity of the gas transmission system and ensure such instances do not reoccur. An example of this was when performing a Non-Destructive Examination (NDE), a contractor did not follow proper procedure when they were setting up their equipment to perform testing on a weld. The contractor was lowering the NDE testing tool into the bell hole by the cable. This improper handling of the equipment may damage the connections and result in equipment damage. On the same job, the contractor failed to follow PG&E's procedure to set up the perimeter before performing the NDE (X-ray) of the welds. The contractor was advised and both items were immediately corrected. Communication of the incident and proper equipment handling was undertaken to ensure awareness and avoid reoccurrence.

Another example involved a pipe coating issue. While conducting Quality Control assessments of a contractor's performance, PG&E discovered a high fail rate with too much coating being applied to the pipe. PG&E also notified the contractors that performed this work to make corrections as needed, including any re-work necessary to comply. In addition and upon further investigation PG&E updated the specification to incorporate updated manufacturer's recommendation and communicated the updated specification to the appropriate internal process owners to correct the PG&E standard and all assessment documentation was promptly changed.

As recently outlined as part of the PSEP Update Application Workshop, the MAOP Validation Project uses several outside contractors for records collection, records review, and MAOP data validation. Outside contractors perform MAOP project work activities both at PG&E sites, and at external locations. PG&E monitors the quality of the work performed by these contractors using a combination of process reviews, quality control reviews, and QA sample testing. The process reviews comprised of process reviews by both PG&E Utility Performance Improvement professionals, and, where appropriate, specialized technical review by external engineering firms. These reviews helped establish the project parameters and to set expectations for contractor work product quality performance. PG&E implemented a comprehensive approach to project quality using both embedded quality control checks and Quality Assurance sample testing designed specifically for the MAOP project's unique requirements. Contractor work products delivered to PG&E are first subjected to a 100 percent quality control review to verify completeness and accuracy of the work product, and the traceability of the documentation. In addition a Quality Assurance sample testing is performed using a combination of manual review and automated data validity checks.

Periodically, the quality process described above does highlight instances where contractors' work does not meet expectations. Some examples are:

- Errors due to misinterpretation of requirements
- Incomplete work product
- Lack of documentation

Errors in the contractor work product typically result in the contractor performing rework to correct and re-submit to PG&E. PG&E conducts weekly communication with each contractor to discuss updates to any requirements, delivery schedule, and the quality of submitted work product. Contractors with repeated quality issues are removed from the project. Work product that has been rejected and sent back for rework with comments and corrective action requests is subject to re-checks via the quality control procedures to ensure correction action has been completed.

5. Quality Assurance – Internal Resources

What quality assurance procedures does PG&E have in place to determine whether the project work is being done correctly by its own employees? Has PG&E found any instances where the work was not done properly? If so, what actions did PG&E take in response?

Response

The PSEP PMO structure and procedures include specific areas of responsibility for Quality Assurance. While each line of business maintains oversight to ensure individual process quality and ensure compliance with PG&E standards, the PSEP PMO since inception has established procedures to independently monitor work performed by employees to ensure its adherence to PG&E standards and thereby assure quality. These assurance procedures involve random assessments that review work activities and documentation for completeness and adherence to the PG&E standard. These random assessment activities on PSEP construction projects include, but are not limited to, areas such as trenching, backfill and compaction, test plan compliance, water discharge plan compliance, inspector gualification, welder gualification and compliance with weld procedures, weld repair rates, pipeline surface prep and field applied coating application. The results of these quality monitoring processes are documented and used to measure the level of quality and provide feedback to the line of business on issues discovered. In addition to communicating these issues back to the line of business, PG&E has implemented a formal corrective action program. This program is used to address internal process, material and systemic issues that are discovered.

PG&E has found instances where our employees did not perform quality work. For example, PG&E welders made multiple repairs on a tie-in weld without a formal weld repair procedure. When this issue was discovered, it was communicated immediately and the weld was then cut out and re-worked using an approved repair procedure. Communication of the incident and proper procedures was undertaken to ensure awareness and avoid reoccurrence.

Similarly within the MAOP Project, internal PG&E employees are subject to the same quality oversight activities described in Question 4 above. They often work side by side with contractor employees to produce the same work product, and the types of errors are the same as described above. When PG&E employees' work product contains errors or is rejected as non-compliant, it is returned to the employee for correction when appropriate. The rejected work product contains a similar type of technical corrective action request that a contractor would receive.

In the first quarter of 2013, the PSEP PMO, as part of the further integration of PSEP with areas of responsibility that span across Gas Operations, has commenced the integration of these Quality Assurance activities covering both employees and contractors into the Gas Operations Quality and Improvement organization.

6. **Project Management Office Overview**

Describe the role of the PMO (see p. 7-10 of Prepared Testimony) in containing project costs. Provide specific examples where the PMO's recommendations led to cost savings.

Response

The role of the PMO, as described in the testimony referenced above, remains unchanged and its objectives can be summarized as follows:

- To help manage the overall Program execution and to coordinate the activities of inter-related projects or work streams.
- To provide oversight and provide observations and recommendations for process improvements and enhanced performance.
- To provide assurance that Program controls and procedures are operating in the way they are intended to achieve Program objectives.

The operation of the PMO supports these objectives and contributes directly to the cost effective execution of the Implementation Plan. The PMO has prioritized its recommendations on areas and actions that are anticipated to provide the most benefit to the Program, including costs effectiveness. While it is not possible to accurately segregate and quantify individual cost savings impacts, specific examples of instances where the PMO has made recommendations that have led to cost savings include, but are not limited to (Workstream¹²):

- Development and maintenance of a Primavera P6 Master Control Schedule (MCS) that details activities for each workstream and provides a robust baseline plan to guide the project teams to deliver each task in time for the next dependent task to occur in a production line-type process (all workstreams).
- Development of workstream meetings with process team leads and project managers promotes an open forum to discuss each project (multiple times a week) and resolve any project problems immediately to reduce delays and stand-by time (all workstreams).

¹² Workstreams refer to component activities identified within PG&E's PSEP Implementation Plan and include Pipeline Replacement, Strength Testing, Valve Automation, In-Line Inspection Upgrades, and Records Improvement, including MAOP and Mariner.

- MCS alignment of project schedules across workstreams to consistently track progress and maintain resource planning across multiple support organizations and across PG&E's service area (all workstreams).
- Extension of initial planning activities to include supplemental engineering reviews and search for records of prior strength tests to ensure that costs are incurred on pipeline that does not already have additional records identified or already validated (Strength Testing).
- Establishing a Construction Management organization, responsible for the delivery of construction activities on all transmission projects, to better integrate contractor and PG&E construction, including Implementation Plan projects and GT&S base work (all workstreams).
- Standardization of project construction schedules to restrict weekend and overtime activities (Strength Testing).
- Consistent productivity and quality performance measurement (all workstreams).
- Standardization of competitive bidding strategy, process and evaluation criteria (all workstreams).
- Development of a Risk Management Plan to understand key program risks and address them prior to their occurrence to avoid project delays and additional costs (all workstreams).
- Development of workstream process delivery manuals to improve the consistent delivery of projects (all workstreams).
- Development of standardized reports to inform PG&E leadership of the progress of the program (all workstreams).
- Development of 2012 Strength Test cost improvement initiatives that led to a 30 percent reduction in Strength Testing costs per mile between 2011 and 2012.
- Development of an Alliance contract model for construction contracting in 2013 (all workstreams).

 Development of a process and model to calculate earned value on each project to gauge efficiency and allow management to intervene on projects as required (all workstreams).

7. Project Management Office Costs and Benefits

Provide the costs incurred by the PMO year-to-date and describe the specific work they did for the benefit of PG&E customers.

Response

The PSEP PMO incurred \$7.3 million and \$8.6 million in costs in 2011 and 2012, respectively, and \$2.3 million in costs for the first three months of 2013, ending March 31, 2013.

The PMO's overall role in ensuring the timely and cost-effective execution of PG&E's Implementation Plan is consistent with PG&E's customers' interest in receiving safe, reliable and affordable gas service. During 2012, the PMO, in partnership with cross-functional leads from PG&E's Customer Care, Government Relations and Corporate Communications departments, focused on many areas that directly benefited Cities, Counties and customers including:

- Consistency of customer communication prior to construction activities: During 2012, lessons learned in 2011 regarding customer communications, including pre-venting notifications for pipeline depressurization, open houses and customer communication materials, were extended across all Implementation Plan workstream construction activities.
- Focus on improving Traffic Management planning: During 2012, the PMO focused on improving the quality and consistency of traffic management planning, particularly supporting permit documentation, and the oversight activities to ensure their appropriate execution in the field.
- Improved pipeline clearance management in 2012 focused upon improving the alignment of project scheduling (pipeline clearances to enable construction) and ongoing gas system operations.
- Planning construction activities to avoid peak winter demand and commercial activity periods (e.g., agricultural harvesting, drying).
- Customer outage management: During 2012, the PMO worked with Gas Operations to increase its compressed and liquefied natural gas (CNG/LNG) equipment fleet to better enable the Program to conduct construction-related pipeline outages within impacting customer service. In support of this effort the PMO helped to improve project planning steps to better identify customer demand requirements, and better integrate this

information into project schedules to ensure the availability of sufficient equipment to meet customer demand and thereby minimize planned customer outages and potentially eliminate unplanned customer outages.

The PMO's role includes many activities that also indirectly impact customers including the implementation and management of consistent program controls and governance, quality control, reporting and initiatives designed to improve project success and increase cost efficiencies.

Budgeting and Spending

8. Factors Impacting Cost Effectiveness

Describe any factors, either internal or external, that may have prevented or affected PG&E from conducting the work in a more cost effective manner. Quantify the cost impact of such factors.

Response

PG&E has consistently sought to address factors that it identified in its Implementation Plan contingency estimate. These include foreseeable factors to executing the PSEP work and challenges that from the nature of the work itself it could not yet identify but could reasonably expect to encounter through the normal course of executing a program of PSEP's scope and depth. Many of these uncertainties and risks have materialized and, in spite of all mitigation efforts, have driven significant upward cost variances into both individual projects and workstreams. These factors have included, but are not limited to the following:

- Changes in pipeline segment attribute data upon completion of data validation and prioritization of individual pipeline segments to maintain system integrity and public safety. This affected the number, scope and location of various PSEP Projects.
- Pipeline replacement routing locations within urban franchise areas is limited based on existing utilities and infrastructure resulting in very complex pipeline routing and construction challenges. PG&E had no way of quantifying the cost and impact this would have on individual projects.
- High water table, trench dewatering costs, excessive permitting conditions, site specific contamination, and excessive waste disposal fees.
- Delays and uncertainty in receiving permits from state and local authorities and agencies, and acquiring additional land rights from customers (compacted construction schedules).
- Specific permitting conditions and restrictions from various cities and counties that dictated the project routing, pipeline depth, restricted work hours (e.g., commute traffic) and limited construction areas.

- Additional construction activities including pipeline cleaning existing pipelines to remove hazard sue material (e.g., oil, grease, pipeline liquids, mercury) prior to strength testing to meet unique waste water disposal requirements; the removal of known and unknown pipeline anomalies (included "rings," windows and a communication cable); the repair and replacement of pipe, valve and fittings due to condition; and construction obstructions and reengineering due to previously unidentified non-PG&E structures or utilities (increased construction duration and costs).
- Limited availability of gas system clearances due to seasonal customer demand and system operations, safety-related pressure reductions, CNG/LNG resources, and the availability of PG&E crews to execute and complete pipeline clearances and tie-ins, particularly towards the end of the construction season.

The specific impact of these risks upon individual projects completed in 2012 is provided in in our response to Question 19.

In aggregate, the above items resulted in 2012 strength testing costs being approximately 100 percent higher than original filing estimates¹³ included in the August 2011 Implementation Plan. While individual pipeline replacement projects particularly in urban areas have been materially affected by the above factors, total 2012 costs were approximately 15 percent higher than the 2012 filing estimate on a portfolio basis. Valve automation was materially impacted by delays in receiving environmental and encroachment permits on certain San Francisco peninsula projects and, while the Program was able to accelerate other valve automation projects to meet annual installation forecasts, the cost impact on these delayed projects remains to be fully determined. Finally, the Program also experienced a 25 percent increase above the filing estimate for ILI upgrade work due to engineering and construction costs that were higher than anticipated.

¹³ Filing estimate refers to baseline costs excluding requested risk-based contingency.

9. Procurement Policy and Practices

Describe PG&E's procurement policy and practices for pipe and other materials used for projects. Was a competitive bidding process used? If not, explain why. Describe what factors PG&E considers in procuring material ranked by importance. Identify the manufacturer(s) or suppliers of the pipe used for the replacement projects and for any material that cost more than \$100,000 per item.

Response

PG&E's practice for the procurement of pipe and other materials follows the same process that we use to procure services and equipment, as noted in PG&E's response to Question 2 in this report. The majority of all material is purchased from existing suppliers through MSAs, the terms and conditions of which (including unit pricing) are the result of a competitive bidding process.

The factors that are generally considered when working with vendors to procure materials in order of importance are: quality, price and availability, supplier diversity, and sustainability. Specific demand requirements, be they project based or for inventory requirements, are submitted to PG&E's transmission pipeline materials distributor, Redman McJunkin (RMC) and Supplies and Solutions (S&S), for quotation among PG&E's three approved pipe manufacturers, provided below. Award is then based on pricing and adherence to required schedule.

Manufacturers or suppliers of the pipe used for PSEP replacement projects during the reporting period are listed below:

- Berg Pipe
- Durabond Industries
- California Steel Industries (CSI)

There were no other materials that cost more than \$100,000 per item procured during the reporting period.

10. Pipeline Disposition Procedures and Costs

What was the disposition (e.g., sold) of replaced pipe and other material? Identify all the amounts earned for the disposition of the material, costs incurred to transport or dispose of the material and regulatory treatment of the incurred costs and revenues.

Response

The disposition of transmission pipeline and other material replaced as part of the PSEP program is one of the following:

- <u>Stored</u> Pipe segments removed from certain designated pipelines

 (e.g., L-132) is retained in designated PG&E storage yards as directed by the CPUC pending the completion of certain activities, including destructive testing. The ultimate disposition of this pipeline remains to be determined.
 The costs associated with the storage of this material are not charged directly to the PSEP program.
- <u>Hazardous Waste</u> Removed pipe and other materials that are identified as hazardous waste are handled and disposed of consistent with PG&E standards and applicable rules and regulations. The costs of transport and disposal of such materials are an integral part of the costs of each project and are included within the costs provided in response to Questions 11 and 12. PG&E has incurred significant costs related to the cleaning of pipeline, and the associated costs of managing and disposing of hazardous waste as a result of such cleaning activities. All such costs are considered costs of the project and subject to PSEP recovery criteria.
- <u>Retired in Place</u> Pipeline that is being retired in place (i.e., being left in the ground and disconnected from PG&E's gas system) is similarly subject to environmental testing and cleaning procedures. The costs of completing retirement procedures including environmental cleaning are charged to the individual projects and subject to PSEP recovery criteria.
- <u>Salvage</u> Remaining pipeline and other materials are processed for scrap, net of transportation, disposal and cleaning costs. Due to the labor involved with excavating, transporting, backfilling and surface repair/restoration the resulting recovery amount is small. In 2012 and on a year-to-date basis through March 31, 2013, PG&E has recovered approximately \$0.20 million

and \$0.17 million, respectively, as a result of this recycling process. All such amounts are credited to customers as a reduction to rate base via accumulated depreciation.

Project Status Summaries

11. Projects Completed During Reporting Period

Provide a complete description or a specific reference to proceeding workpapers, of projects completed during this reporting period and those completed Year-to-Date, include the start and finish dates. On a project-by-project basis, provide the amount budgeted for the project and an itemized list of the costs, including labor and material, incurred completing of the project. Identify the amount that a project was over or under-budget. Indicate whether the work was done in-house or by outside contractor(s). Identify the outside contractor(s). Explain how the work was done in compliance with D.11-0--017 and PG&E's Decision Tree and, if so, provide the Decision Tree outcome identifier associated with each project. Identify costs that shareholders will absorb.

Response

Table 11-1 of the Appendix provides detail on 227 individual projects across four construction workstreams that have been completed by PG&E since the inception of the PSEP program. Table 11-1 includes specific reference to proceeding workpapers of projects completed¹⁴ during this reporting period and those completed year-to-date, including the construction start and finish dates.¹⁵ In addition it provides, on a project-by-project basis, the amount budgeted for the project and an itemized list of the costs, including labor and material, incurred in completing the project; the amount that a project was over or under-budget; and whether the work was completed in-house or by outside contractor(s), including the identification of the outside contractor(s). All work detailed in the table was undertaken in compliance with D.11-06-017; each project included pipeline segments for which a prior strength test has previously not been performed and/or for which traceable, verifiable and complete records of such a test do not exist.

As PG&E progressed from the preliminary work scope and associated estimates and work plans included in its Implementation Plan filing, it developed

¹⁴ For the purposes of this report, the completion of a project is the date the pipeline segments and valves are returned to operations.

¹⁵ For projects completed during the reporting period, construction finish dates may reflect the actual finish date of construction activities.

more specific work plans and estimates. These refined estimates¹⁶, or "Job Estimates," are used in this report for Questions 11-13 and 15 to represent the budgeted amount by project for a more meaningful comparison. Given the continually evolving project scope associated with PSEP, PG&E will have to reconcile its total incurred costs for the work scope contemplated in the Implementation Plan filing to the amounts adopted by the Commission upon completion of the PSEP Phase 1 work scope. As part of this reconciliation, PG&E will be able to provide descriptions of how work was performed in compliance with D.11-06-017, the associated Decision Tree outcome identifier, and costs in excess of the authorized amount for expense and capital expenditures at the project-level, but that information is not yet available for this report. Table 11-2 provides a reference for the specific data points requested in Question-11 to their corresponding column in Table 11-1 of the Appendix. Additional data points are included for context in navigating the tables.

¹⁶ In 2011, job estimates were created at the program-level, but not at the project-level, due to the need to focus resources on deploying PSEP quickly to address priority pipeline projects.

TABLE 11-2 PACIFIC GAS AND ELECTRIC COMPANY DATA POINT/TABLE 11-1 COLUMN REFERENCE

Column Name	Description			
Line #	Reference number for this report.			
PSEP Filing PSRS	PSRS number provided in workpapers supporting PG&E's August 26, 2011 filing.			
New PSRS	New PSRS number resulting from project split or addition.			
Project Description	Order Description provided in workpapers supporting PG&E's August 26, 2011 filing.			
Construction Contractor	Contractor who performed the work ("GC" refers to PG&E in-house).			
Mobilization Date	Project start date.			
Tie-In Date	Project finish date.			
Job Estimate Amount	Amount budgeted for project after completing project engineering, routing, permitting and construction bids.			
Total Cost				
Labor Cost	Itemized costs per project completed.			
Material Cost				
Contract Cost				
Other Cost				
Variance to Budget	Variance between Total Cost and Job Estimate (see Question 19).			
Disallowed Cost	Project costs disallowed based on CPUC Decision, i.e., post-1955 pipe work (does not include any estimation of amounts in excess of individual workstream authorized expenses and capital expenditures).			
>10% Over Budget	Projects greater than 10 percent over Job Estimate.			
Comments	High-level descriptions of changes to the project agenda including project additions, accelerations, delays, and cancelations.			

12. Projects Started, Pending Completion

Provide a complete description, or a specific reference to proceeding workpapers, of projects that have begun but are currently unfinished, include the start and anticipated completion dates. On a project-by-project basis, provide the amount budgeted for each project. Explain how the work is being done in compliance with D.11-06-017 and PG&E's Decision Tree and, if so, provide the Decision Tree outcome identifier associated with each project.

Response

Table 12-1 of the Appendix provides detail on 23 individual projects across four construction workstreams on which construction has been commenced by PG&E and are currently in progress. Table 12-1 includes specific reference to proceeding workpapers, of projects that have started construction but are not yet completed¹⁷ as of the end of the reporting period, including the construction start and anticipated finish dates. In addition, it provides, on a project-by-project basis, the amount budgeted for the project. All work detailed in the table was undertaken in compliance with D.11-06-017; each project included pipeline segments for which a prior strength test has previously not been performed and/or for which traceable, verifiable and complete records of such a test do not exist. PG&E will provide the specific engineering decision tree results supporting the actions being taken within the PSEP program upon completion of its MAOP records validation process and as part of its subsequent Update Application. Table 12-2 provides a reference for the specific data points requested in Question 12 to their corresponding column in Table 12-1 of the Appendix. Additional data points are included for context in navigating the tables.

¹⁷ For the purposes of this report the completion of a project is the date the pipeline segments are returned to operations.

TABLE 12-2 PACIFIC GAS AND ELECTRIC COMPANY DATA POINT/TABLE 12-1 COLUMN REFERENCE

Column Name	Description
Line #	Reference number for this report.
PSEP Filing PSRS	PSRS number provided in workpapers supporting PG&E's August 26, 2011 filing.
New PSRS	New PSRS number resulting from project split or addition.
Project Description	Order Description provided in workpapers supporting PG&E's August 26, 2011 filing.
Mobilization Date	Project start date.
Tie-In Date	Anticipated project finish date.
Job Estimate Amount	Amount budgeted for project after completing project engineering, routing, permitting and construction bids.
Comments	High-level descriptions of changes to the project agenda including project additions, accelerations, delays, and cancelations.

13. Projects Planned, But Yet to Start

Provide a complete description, or a specific reference to proceeding workpapers, of projects that were forecasted for Phase 1 that have yet to start, include the anticipated start and anticipated completion dates. Rank the priority of these projects and explain the ranking. On a project-by-project basis, provide the amount budgeted for the project. Explain how the work was done in compliance with D.11-06-017 and PG&E's Decision Tree and, if so, identify the Decision Tree outcome identifier associated with each project.

Response

Table 13-1 of the Appendix provides detail on 182 individual projects across four construction workstreams on which pre-construction activities have commenced. Table 13-1 provides specific reference to proceeding workpapers, of projects that have yet to commence construction as of the end of the reporting period.¹⁸ For each project, PG&E has supplied the current anticipated construction start and finish dates, which reflect the updated output of the prioritization and schedule procedures or ranking noted above in response to Question 1. In addition, the table provides, on a project-by-project basis, the amount budgeted for the project. All work detailed in the table was undertaken in compliance with D.11-06-017; each project including pipeline segments for which a prior strength test has previously not been performed and/or for which traceable, verifiable and complete records of such a test do not exist. PG&E will provide the specific engineering decision tree results supporting the actions being taken within the PSEP program upon completion of its MAOP records validation process and as part of its subsequent Update Application. Table 13-2 provides a reference for the specific data points requested in Question 13 to their corresponding column in Table 13-1 of the Appendix. Additional data points are included for context in navigating the tables.

¹⁸ Includes projects that have commenced pre-construction activities, but not yet mobilized.

TABLE 13-2 PACIFIC GAS AND ELECTRIC COMPANY DATA POINT/TABLE 13-1 COLUMN REFERENCE

Column Name	Description				
Line #	Reference number for this report.				
PSEP Filing PSRS	PSRS number provided in workpapers supporting PG&E's August 26, 2011 filing.				
New PSRS	New PSRS number resulting from project split or addition				
Project Description	Order Description provided in workpapers supporting PG&E's August 26, 2011 filing.				
Mobilization Date	Anticipated project start date.				
Tie-In Date	Anticipated project finish date.				
Job Estimate Amount	Amount budgeted for project after completing project engineering, routing, permitting and construction bids.				
Comments	High-level descriptions of changes to the project agenda including project additions, accelerations, delays, and cancelations.				

14. Additional Projects Not in Original Workpapers

Describe, in detail, projects that PG&E has completed, are work-in-progress, or have yet to start that were not included in the workpapers submitted in *R.11-02-019.* Explain why these projects have been included in Phase 1 and whether these projects have lowered the priority of other projects identified in proceeding workpapers and, if so, why. Explain how this work complies with *D.11-06-017* and PG&E's Decision Tree and provide the Decision Tree outcome identifier associated with each project.

Response

In the tables referenced in PG&E's prior responses to Questions 11-13, PG&E has identified 40 projects that were not included in the workpapers submitted in R.11-02-019. In each case, an explanation of why these projects have been included in Phase 1 is provided in the column titled "Comments." To date, PG&E has not lowered the priority of other projects that were planned in the August 2011 filing. PG&E will provide the specific engineering decision tree results supporting the actions being taken within the PSEP program upon completion of its MAOP records validation process and as part of its subsequent Update Application.

15. Project Costs > 10% Above Estimate

For completed projects that are 10% or more over estimated costs, provide a detailed explanation why the overrun occurred.

Response

As PG&E progressed from the preliminary work scope and associated estimates and work plans included in its Implementation Plan filing, it developed more specific work plans and estimates. These refined estimates,¹⁹ or "Job Estimates", are used in this report to represent the budgeted amount by project for a more meaningful comparison. Table 11-1 of the Appendix includes 46 projects that have cost variances equal to or greater than 10 percent of the estimated amount after completing project engineering, routing, permitting and construction bids, on a project-by-project basis. Identification of the cost and schedule drivers behind these cost variances are included within the project-by-project risk analysis on Table 19-1 provided in response to Question 19.

¹⁹ In 2011, job estimates were created at the program-level, but not at the project-level due to the need to focus resources on deploying PSEP quickly to address priority pipeline projects.

16. Pipeline Piggability Status

Provide a list and map of pipelines that are currently piggable, highlighting pipe that was made piggable as a result of projects conducted under the PSEP. Provide the total mileage of transmission pipelines, the total mileage of pipelines that are currently piggable and percentage of the total that is piggable.

Response

As shown in Table 16-1 below, 79.13 miles of transmission pipeline (39.35 from transmission pipeline 300A, and 39.78 from transmission pipeline 300B) were made piggable under PSEP, as of March 31, 2013.

TABLE 16-1PACIFIC GAS AND ELECTRIC COMPANYSEGMENTS MADE PIGGABLE UNDER PSEPREPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

Route	Launch	Receiver	Piggable
	Mile Point	Mile Point	Distance(a)
300A	354.19	393.53	39.35
300B	354.09	393.61	39.78

(a) Piggable Distance is measured in PG&E's Geographic Information System (GIS) and does not necessarily equal the difference between launch mile point and receiver mile point.

Figure 16-1, below, shows PG&E's total piggable mileage by transmission pipeline (Route). In total, there are 1,256.56 miles of piggable transmission pipeline (see Table 16-2), which amounts to 18.6 percent of PG&E's 6,738.56 total transmission pipeline miles (as of March 31, 2013). Figure 16-2 provides a map of pipelines that are currently piggable, highlighting pipe that was made piggable as a result of projects conducted under the PSEP.

FIGURE 16-1 PACIFIC GAS AND ELECTRIC COMPANY PIGGABLE MILEAGE BY TRANSMISSION LINE REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

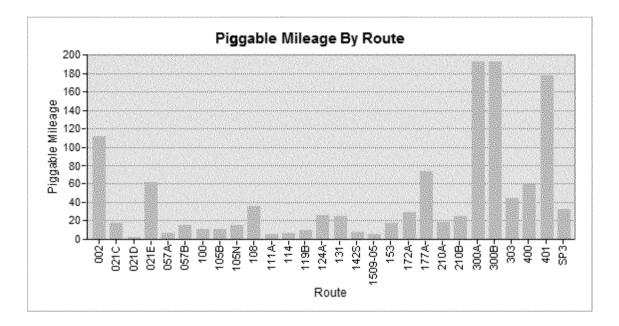


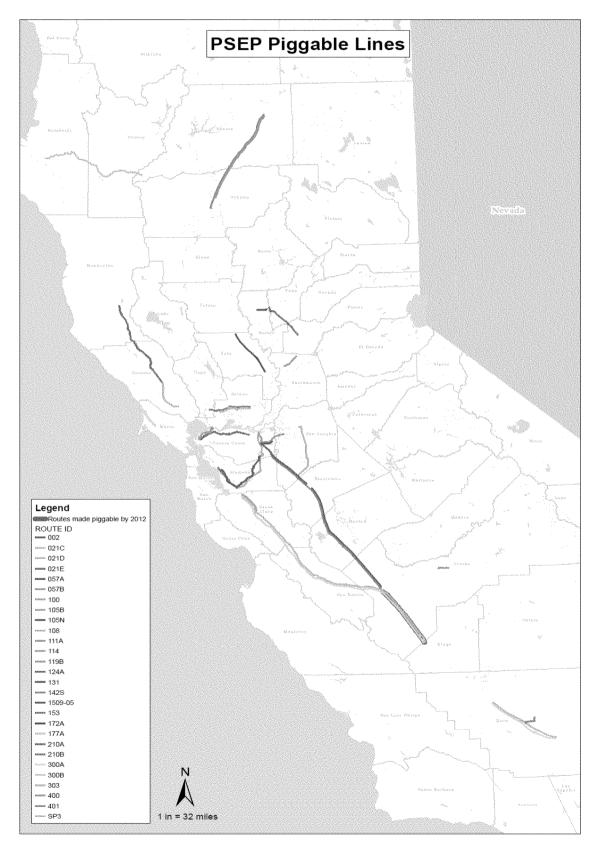
TABLE 16-2PACIFIC GAS AND ELECTRIC COMPANYPIGGABLE TRANSMISSION PIPELINE SEGMENTSREPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

	Launch	Receiver	Piggable	
Route	Mile Point	Mile Point	Distance*	
002	43.45	118.02	75.28	
002	122.06	158.00	36.39	
100	138.43	150.13	11.88	
108	0.00	37.15	36.85	
114	9.03	16.59	7.83	
131	24.88	50.57	26.19	
153	0.00	17.65	17.86	
303	0.00	42.83	44.72	
400	82.33	142.61	60.28	
401	82.34	149.19	67.01	
401	317.95	427.98	110.06	
021C	35.05	53.12	18.67	
021D	18.65	21.88	3.22	
021E	53.12	64.36	11.39	
021E	64.54	93.67	30.77	
021E	93.67	114.89	20.20	
057A	9.18	16.68	7.41	
057B	0.00	16.68	16.62	
105B	0.00	11.81	11.84	
105N	7.75	23.00	16.27	
111A	20.89	27.54	6.67	
119B	0.00	10.16	10.54	
124A	0.00	26.03	26.42	
142S	0.00	D 9.01		
1509-05	0.00	6.49	6.45	
172A	40.07	69.81	29.78	
177A	88.80	163.04	74.48	
210A	1.38	19.47	18.98	
210B	1.37	25.98	25.57	
300A	256.21	299.00	43.39	
300A	393.53	450.83	57.29	
300A	450.83	502.24	52.01	
300A**	354.19	393.53	39.35	
300B	256.64	299.00	43.23	
300B	393.76	450.79	57.18	
300B	450.79	502.64	52.45	
300B**	354.09	393.61	39.78	
SP3	167.31	198.49	33.19	

* Piggable Distance is measured in GIS and does not necessarily equal the difference between launch mile point and receiver mile point.

** PSEP segment.

FIGURE 16-2 PACIFIC GAS AND ELECTRIC COMPANY PIGGABLE TRANSMISSION PIPELINE SEGMENTS REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013



17. Lessons Learned in Phase 1 Work

Describe any lessons learned from undertaking the Phase 1 work that has led to cost efficiencies and quantify any cost savings.

Response

In 2012, the Strength Testing workstream undertook a series of cost reduction efforts to improve unit cost performance. Team members identified over 41 separate processes and cost improvement initiatives and worked to identify and implement solutions. As a direct result of following these process improvements, the workstream lowered the cost per mile from \$1.4 million per mile in 2011 to approximately \$1.02 million per mile in 2012. PG&E did not measure the cost savings of every initiative since the improvements to deliver strength testing had a combined impact on lowering the unit costs. However, the following is a list of some of the initiatives implemented that led to cost savings:

- Implemented fixed price bid for construction instead of time and material.
- Expanded the pool of qualified construction contractors from 2 to 7.
- Implemented the use of Poly Tanks, rather than vacuum trucks, to store on-site liquids.
- Purchased, rather than leased, water filtration units and increased their size.
- Developed a Mercury Assessment and Cleaning Team that experimented with mercury cleaning techniques, developed a faster more efficient cleaning procedure, and provided advice to field operations during the cleaning process.
- Combined multiple overlapping inspector roles to reduce the number of inspectors on site.
- Eliminated unnecessary process steps to certify tests and Automatic Ball Indentation (ABI) testing.
- Implemented the use of tracer gas to reduce the time to search for and locate leaks that occur during strength testing.
- Improved water sampling process and sequencing to reduce stand-by time.

Examples of the impact these lessons learned had on operational productivity between 2011 and 2012 include:

- Replacing 40 more miles of pipe in 2012 compared to 2011.
- Retrofitting 78 more miles of pipe in 2012 compared to 2011.
- Automating 33 more valves in 2012 compared to 2011.
- Conducting MAOP Records Integration on 2,112 miles more pipe in 2012 compared to 2011.

In 2013, PG&E has extended this lessons learned process to the other construction workstreams (i.e., Pipeline Replacement, Valve Automation and ILI Upgrades/ILI Inspections). While the workstream teams continue to refine the final list of 2013 improvements, activities on many initiatives have already made significant progress, such as PG&E's implementation of a Transmission Construction Contractor Alliance.

PG&E has recently signed partnership agreements with four highly regarded and experienced construction contractors that are aimed at ensuring the long-term availability of essential construction resources and the consistency of labor and activity rates used to complete construction activities. Each of the Alliance partners is committed to delivering industry-leading levels of safety, quality and cost effectiveness.

PG&E has identified other initiatives for improving costs that are intended for implementation in 2013, which include:

- Developing an IT system to track and approve change orders and documents to reduce stand-by time for contractors waiting for approval to proceed with a change.
- Improving chemical cleaning handling by reducing the amount of waste and using train cars, rather than trucks, to ship waste to an approved facility rather than trucking.
- Utilizing PG&E-owned baker tanks and test heads to reduce lease and fabrication costs.
- Training and utilizing on-site contractors to perform tie-ins work typically done by limited PG&E resources. This should reduce overtime and stand-by time.
- Improving the dispatching of inspectors to reduce unnecessary inspector hours on-site.

18. Potential Enhancements to Phase 2 Planning and Budgeting

How will the work PG&E conducts in Phase 1 influence how PG&E will plan and estimate the costs of its proposed projects for Phase 2?

Response

The work PG&E conducts in Phase 1 will have a direct influence on how PG&E will plan and estimate the costs of its proposed projects for future work phases, including:

- <u>Employee and Public Safety</u> In delivering on its commitments in PSEP Phase 1, PG&E has focused upon maintaining employee and public safety as the primary consideration. As a result, PG&E has taken specific actions to engage employees, contractors and customers on the underlying reason for undertaking the work in Phase 1. This has resulted in increased levels of accountability for customer outreach, safety performance and quality. As PG&E plans future work we will continue to place employee and public safety as the primary consideration in all that we do.
- <u>Scope Definition</u> Having completed records validation of PG&E's entire gas transmission pipeline system during Phase 1, PG&E will have greater certainty as to the precise scope of future work, including project location and lengths. As a result, schedule and cost uncertainties identified in Phase 1 related to scope uncertainty will likely be reduced.
- <u>Risk Management</u> Having completed the unprecedented level of construction activities in Phase 1, PG&E will have a clearer understanding of the risk profile of projects and the key mitigation activities that are essential to project success. In 2012, PG&E successfully developed and implemented specific pipeline cleaning and water handling procedures that dramatically improved PG&E's ability to execute effective and efficient strength tests. PG&E identified these and other significant potential risks in its original request and will now be better able to demonstrate the potential impact such factors will have on future work.
- <u>Cost Drivers and Resource Management</u> Having successfully scaled to meet the unprecedented construction commitments in Phase 1, PG&E will have a greater understanding of the attainable efficiency levels through future years of the Implementation Plan. In 2012, PG&E successfully implemented

cost reduction initiatives that improved the unit cost per mile performance of strength testing by over 30 percent. PG&E anticipates that the process refinements that have led to greater cost efficiency in Phase 1 will provide greater certainty surrounding cost forecasts for future work. Also, particularly for strength testing, the large number of projects completed will provide valid data for a much more accurate cost model than was used to forecast strength test costs in PG&E's August 26, 2011 filing.

In spite of all the activities noted above, it should be anticipated that the costs associated with risks that were identified by PG&E in its original PSEP filing as involving large elements of uncertainty, such as water handling and pipeline cleaning, pipeline replacement routing designs and construction challenges in urban areas, especially the San Francisco Peninsula have materialized for many projects. As a result, costs have been significantly higher to complete strength testing and urban pipeline replacement than originally forecast in the PSEP filing. Also, other risks rarely encountered in Phase 1 are still possible for future phases and will create some forecast uncertainty. For example, as strength testing begins on long pipelines through Class 1 areas, which are also typically environmentally sensitive areas and are the single source of gas for large communities, such as long single radial pipelines with no alternative natural gas supply, e.g., L-177 from Red Bluff to Eureka (approximately 100 miles long), there will be significant challenges to overcome how to serve the community when the pipe is out of service for months to conduct strength testing.

Based on the experiences of Phase 1, PG&E will be able to anticipate where these higher cost risks are likely to occur and adjust the project cost estimates accordingly with more certainty and better accuracy.

19. Cost Impacts of Unexpected or Unforeseen Items

What, if any, significant unexpected or unforeseen items did PG&E encounter in undertaking the projects and what were the resulting cost impacts on a project-by-project basis?

Response

Table 19-1 of the Appendix provides PG&E's most recent risk management analysis with a project-by-project analysis of unexpected or unforeseen items that have affected 2012 projects and the resulting cost impacts and identifies ways in which PG&E is incorporating the lessons learned into ongoing project delivery processes.

"Changes After Issue for Bid (After IFB)"²⁰ and "Permitting"²¹ caused the greatest cost increases overall totaling about \$6.2 million and \$3.4 million, respectively. "Productivity Impacts"²² and Permitting accounted for the greatest number of schedule delays with an average of 11-12 days per project for a total of 344 and 193 days of delay, respectively.

This report identified the following main risk areas and mitigation activities:

- Productivity Impacts
 - <u>Results</u> This risk was experienced in all except the valve automation workstream and accounted for the greatest impact on scheduling; however, it is important to note that this data refers only to issues experienced during the construction phase and if broadened would have affected all workstreams because some valve projects had to be completely rescheduled due to productivity and permitting delays. The primary cause behind this issue was lack of a variety of resource availability when needed.
 - <u>Recommendations</u> Utilize the Contractor Alliance and regional planning to coordinate scheduling projects from different workstreams in the same vicinity to avoid resource scheduling conflicts (e.g., CNG/LNG and General Construction (GC)) that affect productivity. Include a

²⁰ Any scope changes made to the project after IFB.

²¹ Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g., limited working hours, limited access, delays in issuance, etc.).

²² Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.

requirement in the issued for bid documentation for the construction contractor to provide bid prices for non-work days. This can then be used for pricing delays caused by productivity impacts, but also for other causes such as the potential identification of endangered and weather.

Changes After IFB

- <u>Results</u> Primarily occurring on strength test and valve automation projects, this risk had the greatest impact on cost and the third greatest impact on scheduling. The most frequently occurring changes were additional excavation, sniff holes, bell holes, and/or welding.
- <u>Recommendations</u> The Contractor Alliance should help reduce this risk because the contractors will be involved earlier in the planning process and familiar with the type of work being done so they can better plan their resources, be aware of the risks and contribute to mitigation plans. In addition, our own experience from 2012 will allow for better project planning and design which should reduce the number of changes needed. The more common changes that occurred in 2012, mentioned above, should be identified as potential risks early in planning with the costs detailed in the CWA to reduce the cost increase if they occur.

Permitting

- Results Arising as a top issue particularly for pipeline replacement and valve automation projects, permitting had the second greatest impact on both cost and scheduling typically due to strict permitting constraints that required renegotiation and extended contractor labor hours in order to complete work in a timely manner and due to certain agencies that were particularly slow and difficult to obtain permits from. Some projects not represented here, particularly in the valve automation workstream, had such great permitting issues that they had to be rescheduled to a later year entirely.
- <u>Recommendations</u> Regional planning between workstreams so that projects in the same vicinity are not competing for permits where a city or agency will only allow one project at a time should reduce the number of permitting issues that resulted in one or more projects being delayed in 2012. Also, since the contractors will be brought on board sooner, they

can obtain their encroachment permits with sufficient time before IFC to avoid delays which was an issue particularly on pipeline replacement projects in 2012. Also, with our gained experience in 2012, we know which cities or agencies require more time or attention to obtain permits so we can plan for those accordingly by involving PG&E's Government Relations department early in project planning.

• Field Conditions Differ From Expected Conditions

- <u>Results</u> Occurring primarily on strength test projects as a cost impact, this issue was generally a result of GIS inaccuracies or insufficient information resulting in the as-built drawings not matching what was encountered in the field so re-engineering and additional work was required.
- <u>Recommendations</u> This is a risk that will be further explored to determine how to reduce its impact going into 2013. However, some items may be avoidable with more thorough QC during engineering drawing review, limited details that perhaps could have been researched, or too specific detail where a margin of error should be included to account for the risk of GIS inaccuracy.

PG&E is in the process of supplementing this risk analysis with the results of the 2013 PSEP projects and will provide updates to this information on an ongoing basis. Table 19-2 provides a reference for the specific data points requested in Question 19 to their corresponding column in Table 19-1 of the Appendix. Additional data points are included for context in navigating the tables.

TABLE 19-2 PACIFIC GAS AND ELECTRIC COMPANY DATA POINT/TABLE 19-1 COLUMN REFERENCE

Column Name	Description
Line #	Reference number for this report.
New PSRS	New PSRS number resulting from project split or addition.
Project Description	Order Description provided in workpapers supporting PG&E's August 26, 2011 filing.
Region	Region where line is located.
Risk	Categorization of risk factor affecting the project.
Description	Description of risk factor.
Cost Impact (\$)	Impact of risk to project cost.
Cost Impact (\$/Mi)	Impact of risk to project cost per mile.
Schedule Impact (Days)	Impact of risk to schedule in number of days.
Schedule Impact (Days/Mi)	Impact of risk to schedule in number of days per mile.
>10% Variance	Projects greater than 10 percent over Job Estimate.
Comments	Description of how risk factor materialized.

20. Program Amount Authorized and Spent

Provide a table showing the total amount authorized for recovery from ratepayers and the total amount spent by PG&E year-to-date shown by month and broken down activity (e.g., hydrotesting, pipe replacement).

Response

Table 20-1, below, shows the total amount spent by activity for the first quarter of 2013 (including by month January 1 – March 31), the period from program inception to December 31, 2011, and the full year 2012. Amounts authorized for customer recovery during these periods and the amounts funded by shareholders are provided at the program level, consistent with the presentation in Attachment E to the December 2012 CPUC PSEP Decision.

TABLE 20-1PACIFIC GAS AND ELECTRIC COMPANYAUTHORIZED AND ACTUAL PSEP COSTS BY ACTIVITYREPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013^(a)

Pipeline Safety Enhancement Plan			Actual	Costs				Cus	tomer Recov	ery Authorized	j (a)	
PSEP Expense	4/1/2011- 12/31/2011	2012	2013 YTD	Jan-13	Feb-13	Mar-13	Total 4/1/2011 to 3/31/2013	4/1/11- 12/31/2011	2012	2013	Total 4/1/2011- 12/31/2013	Total Sharehold Funded 4/1/20 to 3/31/2013
Pipeline Modernization												
Pipe Replacement	0.0	0.0	0.3	0.3	0.0	(0.0)	0.3					
In Line Inspection	0.0	0.0	0.2	0.0	0.0	0.1	0.2					
Strength Test												
Pre-1955 Installation	110.1	130.7	5.4	0.6	3.1	1.7	364.3					
Post-1955 Installation	228.2	130.7	4.1	1.4	0.9	1.7	4.1					
Strength Test Total	228.2	130.7	9.5	2.0	4.1	3.4	368.4					
Pipeline Modernization Total	228.2	130.7	10.0	2.4	4.1	3.5	368.9	0.0	2.3	65.9	68.2	360
Pipeline Records Integration												
MAOP	90.5	120.3	16.9	4.6	5.5	6.9	227.7	2012201-000000				
Mariner	1.2	3.8	1.6	0.4	0.5	0.8	6.6					
Pipeline Records Integration Total	91.6	124.1	18.6	4.9	6.0	7.7	234.3	0.0	0.0	0.0	0.0	23
Valve Automation	0.0	0.5	0.6	0.1	0.3	0.2	1.1	0.0	0.1	3.0	3.1	
Interim Safety Measures	0.0	2.4	0.5	(0.0)	0.0	0.5	2.9	0.0	0.0	1.1	1.1	
PMO	5.0	6.5	0.3	0.2	0.1	(0.0)	11.9	0.0	0.1	3.3	3.4	1
Other	6.8	6.3	1.4	0.3	0.3	0.7	14.5	0.0	0.0	0.0	0.0	1
otal PSEP Expense	331.7	270.4	31.4	7.9	10.9	12.6	633.5	0.0	2.6	73.3	75.8	622
SEP Capital												
Pipeline Modernization Pipeline Replacement												
Pipeline Replacement less Post-1955 Strength Test Cost	11.5	226.0	43.6	15.5	11.6	16.5	281.2	SCSSURGESSER				STRUCTURE STRUCTURE
Post-1955 Strength Test Cost	0.0	220.0	2.5	2.5	0.0	0.0	4.6					
Pipeline Replacement Total	11.5	228.1	46.1	18.0	11.6	16.5	285.8					
Strength Test Related In Line Inspection Retrofitting	5.9 0.6	12.3 16.0	1.8	1.0 2.0	0.7 3.9	0.1 5.5	20.0 28.0					
Pipeline Modernization Total	18.0	256.4	11.4 59.3	21.0	16.2	22.1	333.7	30.5	214.9	290.1	535.5	10000000000000000000000000000000000000
Pipeline Records Integration												
MAOP	1.7	0.3	0.0	0.0	0.0	0.0	2.0	STREET, STREET	1923.00125523	DANONATIONS		85339595553
Madr	4.9	29.3	7.2	2.3	1.2	3.7	41.4					
Pipeline Records Integration Total	6.5	29.6	7.3	2.3	1.2	3.8	43.4	0.0	0.0	0.0	0.0	4
Valve Automation	13.0	27.2	5.9	1.3	2.6	2.0	46.0	13.7	38.9	51.6	104.2	
Interim Safety Measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PMO	2.3	2.1	2.0	0.6	0.4	0.9	6.3	3.0	6.5	6.5	16.0	
Other	0.0	3.0	2.3	0.8	0.7	0.8	5.2	0.0	0.0	0.0	0.0	
tal PSEP Capital	39.8	318.2	76.7	26.1	21.0	29.6	434.8	47.2	260.3	348.2	655.7	

(a) Amounts authorized for customer recovery are consistent with Authorized Program Expenses and Authorized Capital Costs presented in Attachment E to the Decemb er 2012 CPUC PSEP Decision, and are subject to update upon completion of PG&E's records validation process and subsequent Update Application filing, as directed by the CPUC in Ordering Paragraph 11 of that decision. 2013 authorized reflects a full year (January – December 2013).

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21. Shareholder Costs Absorbed

Provide a table showing the total amount of costs that shareholders will absorb year-to-date shown by month and broken down activity (e.g., hydrotesting, pipe replacement).

Response

Table 20-1 included in response to Question 20 provides the total amount of costs that shareholders have absorbed on a year-to-date basis for the period from Program inception (April 1, 2011) through the first quarter of 2013 (March 31, 2013). The amounts are provided at the program level, consistent with the presentation in Attachment E to the December 2012 CPUC PSEP Decision.

22. Forecast vs. Actual Mileage – Replacements

Provide a table showing the total mileage of pipe PG&E forecast to replace in R.11-02-019 and the mileage PG&E has replaced year-to-date. Identify the location, Line #, milepost, Class of the pipe replaced. Indicate whether the pipe is located in a High Consequence Area.

Response

As of March 31, 2013, PG&E has replaced over 45 miles of gas transmission pipeline as part of the PSEP Program. Table 22-1, below, provides the total pipeline miles PG&E forecast to replace in R.11-02-019 and the total pipeline replaced through the end of this reporting period. Table 22-2 of the Appendix provides detail on 24 completed projects and identifies the location, pipeline number, milepost, class of the pipeline section replaced, and indicates whether the pipeline section is located in a HCA on a project-by-project detail. Table 22-3 provides a reference for the specific data points requested in Question 22 to their corresponding column in Table 22-2 of the Appendix. Additional data points are included for context in navigating the tables.

TABLE 22-1 PACIFIC GAS AND ELECTRIC COMPANY TOTAL PIPELINE MILES REPLACED – FORECAST AND ACTUAL REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

Pipeline Replacement	2011	2012	2013 YTD	2013
Forecast R.11-02-019	0.3	39	n/a	64
Replaced and Tied-In(a)	0.3	29.4	1.6	n/a
Installed pending Tie-In	-	10.8	3.3	n/a
Total	0.3	40.2	4.9	n/a
Current Forecast				64

(a) Mileage subject to final engineering review of "as-built" drawings to validate segment-level completion of PSEP scope.

TABLE 22-3 PACIFIC GAS AND ELECTRIC COMPANY DATA POINT/TABLE 22-2 COLUMN REFERENCE

Column Name	Description
Line #	Reference number for this report.
PSEP Filing PSRS	PSRS number provided in workpapers supporting PG&E's August 26, 2011 filing.
New PSRS	New PSRS number resulting from project split or addition.
Project Description	Order Description provided in workpapers supporting PG&E's August 26, 2011 filing.
Miles Completed	Miles of pipeline replaced or tested.
Line	Pipeline identifier.
MP1	Beginning project mile point.
MP2	Ending project mile point.
City	Location of project.
НСА	Project includes a High Consequence Area.
Class Code	Class of pipeline included in project.
Clearance Date	Date pipe was cleared and work authorized to begin.
Tie-In Date	Date pipe became operational and project completed.

23. Forecast vs. Actual Mileage – Strength Testing

Provide a table showing the mileage of pipe PG&E forecast to hydrotest in *R.11-02-019* and the mileage PG&E has tested year-to-date. Identify the location, Line #, milepost, Class of the pipe tested. Indicate whether the pipe is located in a High Consequence Area.

Response

As of March 31, 2013, PG&E has completed strength testing on over 432 miles of gas transmission pipeline since the inception of the PSEP program, including the validation of the records of over 90 miles of prior hydrotests as meeting the "traceable, verifiable and complete" standard. Table 23-1 below, provides the total pipeline PG&E forecast to strength test in R.11-02-019 and the total strength tested through the end of this reporting period. Table 23-2 of the Appendix provides detail on 175 completed projects and identifies the location, pipeline number, milepost, class of the pipe replaced, and indicates whether the pipe is located in a HCA on a project-by-project detail. Table 23-3 provides a reference for the specific data points requested in Question 23 to their corresponding column in Table 23-2 of the Appendix. Additional data points are included for context in navigating the tables.

TABLE 23-1 PACIFIC GAS AND ELECTRIC COMPANY TOTAL PIPELINE MILES STRENGTH TESTED – FORECAST AND ACTUAL REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

Pipeline Strength Testing	2011	2012	2013 YTD	2013
Forecast R.11-02-019	236	185	n/a	204
Actual tested and Tied-In	163.6	176.7	1.38	n/a
Records Validated(a)	50.9	27.8	13.7	n/a
Total Tied-In and Records Validated	214.5	204.5	15.1	n/a
Current Forecast				204

(a) Includes pipeline miles for which records of a prior hydrotest were validated as meeting the traceable, verifiable and complete records standard.

TABLE 23-3 PACIFIC GAS AND ELECTRIC COMPANY DATA POINT/TABLE 23-2 COLUMN REFERENCE

Column Name	Description
Line #	Reference number for this report.
PSEP Filing PSRS	PSRS number provided in workpapers supporting PG&E's August 26, 2011 filing.
New PSRS	New PSRS number resulting from project split or addition.
Project Description	Order Description provided in workpapers supporting PG&E's August 26, 2011 filing.
Miles Completed	Miles of pipeline replaced or tested.
Line	Pipeline identifier.
MP1	Beginning project mile point.
MP2	Ending project mile point.
City	Location of project.
HCA	Project includes a High Consequence Area.
Class Code	Class of pipeline included in project.
Clearance Date	Date pipe was cleared and work authorized to begin.
Tie-In Date	Date pipe became operational and project completed.

24. Public Outreach Costs

Provide the costs of the public outreach PG&E has incurred year-to-date by month as compared to the amount authorized. Explain in detail what public outreach activities PG&E has engaged in.

Response

Customer Outreach is included as an integral part of each of PG&E's PSEP construction projects. Table 24-1 below provides customer and community outreach costs incurred since program inception shown annually for 2011-2012 and monthly during 2013.

TABLE 24-1 PACIFIC GAS AND ELECTRIC COMPANY PUBLIC OUTREACH COSTS REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013 (IN MILLIONS OF DOLLARS)

Public Outreach Costs	2011	2012	January 2013	February 2013	March 2013	YTD 2013
Total Costs	2.62	4.54	0.36	0.35	0.38	1.09

The CPUC's PSEP decision approved customer outreach costs, including governmental outreach, within individual project estimated costs. PG&E's estimated customer outreach costs varied by workstream driven by the nature of the work and were based upon a percentage of project costs before project management and escalation. For pipeline replacement and strength testing projects, the customer outreach estimate was 2.9 percent, and for valve automation projects was 0.54 percent. Specific monthly authorized amounts cannot be accurately determined from the CPUC decision due to individual project durations and the timing of activities within projects; however, PG&E notes that customer outreach costs have averaged approximately 1 percent of total project costs. PG&E has been able to reduce customer outreach costs through effective integration of customer impact planning and outreach activities within each project, the successful leverage of additional portable CNG/LNG equipment to minimize customer impacts, and the reduction of unit costs for outreach materials, mailing and communications delivery. Public outreach activities undertaken by PSEP have included the use of Interactive Voice Responses (IVR, or automated phone notifications), letters, open houses, signage, door-to-door canvassing,

one-on-one customer phone calls and meetings, and customer group presentations.

Customer Outreach activities are managed on a consistent basis across all PSEP workstreams by a dedicated team within PG&E's Customer Care organization. Each project follows a standardized process for customer outreach which includes, but is not limited to:

- Site walk with project team to identify customer impacts.
- Letter to impacted customers.
- Invitation to an open house, hosted within the affected project area.
- Work location signage prior to mobilization.
- IVR sent to area customers prior to significant activities (e.g., venting/release of natural gas).
- Additional customer outreach and accommodations as dictated by the nature of the project (e.g., temporary relocation for nitrogen strength test).
- Local customer canvassing to identify and incorporate feedback into ongoing procedures.

PG&E periodically conducts telephone surveys among PG&E customers in areas affected by PSEP work. The key objectives of this research are to determine customer awareness of specific communications or outreach efforts, assess these efforts in terms of recall, clarity, completeness, effectiveness, and other factors, measure overall customer satisfaction with PG&E's communication and outreach efforts, and identify areas for improvement in future communications and outreach efforts. The initial survey was completed in 2011, and two additional surveys were conducted in the second quarter of 2012 (Q2 2012), and the fourth quarter of 2012 (Q4 2012). Survey results indicate PG&E's communications and outreach program has steadily improved customer perception of safety:

 Customers feel safer knowing PG&E completed pipeline testing in their neighborhood – 90 percent in Q4 2012, up from 82 percent in 2011 and 86 percent in Q2 2012.

- Customers feel much safer knowing PG&E completed pipeline testing in their neighborhood – 50 percent in Q4 2012, up from 32 percent in 2011 and 42 percent in Q2 2012.
- Customers were mostly satisfied with communications they received from PG&E regarding pipeline testing – 79 percent in Q4 2012, up from 69 percent in 2011 and 75 percent in Q2 2012.

As part of project design and planning activities, PG&E also identifies and reviews specific customer impacts. Where customer loads are significant, PG&E will work with assigned account representatives to schedule activities to minimize the impact to customers. This may involve scheduling tests outside of agricultural peak periods or scheduling project activities to occur outside of school hours or key events.

25. Service Outage Performance

Describe (e.g., provide date(s), location, Line #) all planned and unplanned service outages PG&E experienced in conducting the project work and explain how PG&E addressed customer needs during the outages. Were customers notified of any outages beforehand?

Response

PG&E has successfully conducted gas transmission pipeline outages supporting 227 completed construction projects, with minimal impact to customer service. Tables 22-2 and 23-2 provide pipeline outage dates, locations and pipeline numbers, on a project-by-project basis for completed pipeline replacement and strength testing projects. Table 25-1 of the Appendix supplements these tables by providing information for completed valve automation and ILI projects. Table 25-2 provides a reference for the specific data points requested in Question 25 to their corresponding column in Table 25-1 of the Appendix. Additional data points are included for context in navigating the tables.

TABLE 25-2 PACIFIC GAS AND ELECTRIC COMPANY DATA POINT/TABLE 25-1 COLUMN REFERENCE

Column Name	Description
Line #	Reference number for this report.
PSEP Filing PSRS	PSRS number provided in workpapers supporting PG&E's August 26, 2011 filing.
New PSRS(s)	New PSRS number resulting from project split or addition.
Project Description	Order Description provided in workpapers supporting PG&E's August 26, 2011 filing.
Miles Completed/Valves Automated	Miles of pipeline strength tested, replaced or number of valves automated.
Line	Pipeline identifier.
MP1	Beginning project mile point.
MP2	Ending project mile point.
City	Location of project.
НСА	Project includes a High Consequence Area.
Class Code	Class of pipeline included in project.
Clearance Date	Date pipe was cleared and work authorized to begin.
Tie-In Date	Date pipe became operational and project completed.

As previously mentioned, initial project design and planning activities include identification of potential customer impacts. PG&E specifically works to minimize the impact to customers and schedules work where possible to avoid customer outages by using existing system redundancies (e.g., cross compression, parallel pipes or back-feeds to maintain customer service). This is a primary reason why many construction activities cannot take place during seasonal winter gas demand periods.

PG&E has previously identified that it will not be possible to complete the entire scope of the Implementation Plan without impacting customer service in certain circumstances. To eliminate this potential customer impact in most cases, PG&E has increased its portable CNG/LNG program to provide an alternative option to avoid customer outages. PG&E grew the portable equipment from 22 units in 2010 to 174 units in 2013. Most of the equipment is custom designed

and built specifically to support customers during pipeline outages. The CNG/LNG portable program and operations is now an integral part of project planning and scheduling activities and supported over 316,000 days of customer service across 171 projects in 2012. In one operation in Felton in July 2012, LNG portions of this fleet maintained two weeks of continuous 24-hours-a-day/7-days-a-week service to over 20,000 customers in the Santa Cruz area in support of a strength test and included fire department training as part of PG&E's commitment to ensure ongoing public safety.

Where customer loads or pressure requirements are so significant that portable CNG/LNG becomes impossible or impractical, PG&E has worked with assigned account representatives to schedule activities to minimize impact. This has involved scheduling tests outside of agricultural peak periods, commercial work hours and scheduling project activities to occur outside of school hours or key events. Several times, the outage was redesigned to ensure continuous service to a customer. For example, when planning for a strength test near Sonol included the input of an impacted commercial customer, the test and related outage was rescheduled from during the week to occur over the weekend to minimize the impact to the customer's commercial operations.

26. Forecast Projects Not Completed or Replaced

Describe or provide a specific reference to PG&E's work papers of the projects that were not completed or replaced by a higher priority project and show the uncompleted project's associated costs. Compute the corresponding reduction to the Implementation Plan adopted amounts set out in Attachment E, as required by Ordering Paragraph 6.

Response

PG&E estimates 86 projects that were originally planned to be executed in 2011 and 2012 may no longer be required (e.g., identification and validation of the records of a prior strength test). Table 26-1 of the Appendix includes a list of planned projects, with specific reference to prior PG&E work papers that were not completed or replaced by a higher priority project through March 31, 2013.

Considering the natural evolution of the specific project work scope within the programs included in the August 2011 Implementation Plan filing and the preliminary nature of the associated cost estimates at the time (i.e., program level estimates based on limited project definition and design completion), PG&E is unable to quantify potential reductions to the adopted amounts set out in Attachment E of D.12-12-030 until it completes its detailed segment analysis and updated estimates associated with the Update Application later this year. Following the completion of this Update Application, PG&E will be able to reconcile its incurred PSEP costs with the adopted program amounts in D.12-12-030, and compute the corresponding reduction to the Implementation Plan adopted amounts set out in Attachment E, if any, as required by Ordering Paragraph 6.

Table 26-2 provides a reference for the specific data points requested in Question 26 to their corresponding column in Table 26-1 of the Appendix. Additional data points are included for context in navigating the tables.

TABLE 26-2 PACIFIC GAS AND ELECTRIC COMPANY DATA POINT/TABLE 26-1 COLUMN REFERENCE

Column Name	Description
Line #	Reference number for this report.
PSEP Filing PSRS	PSRS number provided in workpapers from proceedings.
New PSRS	New PSRS number resulting from project split or addition.
Project Description	Order Description provided in workpapers from proceedings.
PSEP Filing Year	Year project anticipated to begin as stated in the filing.
Current Status	Current project status.
Comments	High-level descriptions for projects that were not completed or replaced.

27. Project Cost Recovery

Provide a clear explanation, for each project for which expenditures have been incurred, of how the project is necessary to comply with PSEP requirements rather than being included among projects that are already funded in D.11-04-031.

Response

The scope of PG&E's PSEP is based upon pipeline segments previously identified as not having been strength tested and/or without traceable, verifiable and complete records of such a test. The specific actions to be taken under PSEP and the prioritization of such projects are based upon the results of consistently applying a sequential decision process (Decision Tree) to pipeline segment features information. PG&E's original PSEP scope was based upon pipeline data as of April 2011 and PG&E anticipated that the update and completion of the review of pipeline segment information would alter the scope of PSEP's projects. During the PSEP proceeding, PG&E confirmed that the PSEP scope, as filed, excluded any pipeline segments previously included within other recovery mechanism, including projects approved as part of the Gas Accord V Settlement in D.11-04-031.

To the extent that additional scope has been added to a PSEP project that does not meet the PSEP Decision Tree criteria (or it is a non-adjacent non-HCA Class 1 of 2 pipe segment) PG&E has identified and is separately tracking costs associated with this increased project scope. Examples would be an increase in pipeline diameter to support future capacity needs or a project identified in D.11-04-031 is engineered, permitted and constructed with an adjacent PSEP project to capture efficiencies.

PG&E will provide the specific engineering decision tree results supporting the actions being taken within the PSEP program upon completion of its MAOP records validation process and as part of its subsequent Update Application.

28. Record Improvement Efforts Progress

Progress report on record improvement efforts, including report on costs absorbed by shareholders.

Response

PG&E's Mariner Project (formerly referred to as the GTAM Project), is part of the Pipeline Records Integration Program proposed in the PSEP filing. The Mariner Project will further enhance the safety and reliability of PG&E's gas transmission system through increased access to pipeline systems data, integrated risk management and integrity management analytics.

The Mariner project made progress in several functional areas by providing new mobile devices to field personnel, replacing outdated hardware, providing access to electronic maps, and converting records as part of the MAOP Validation Project. Mariner is also progressing toward deploying integrated risk management tools, integrating work management and asset systems, and mobilizing corrective and preventative maintenance processes.

29. Additional Relevant Information

Any additional relevant information not listed above as specified in hearing Exh. 2 at 8E-1 and 8E-2.

Response

PG&E considers that the information provided within this report covers all aspects previously outlined in *hearing Exh. 2 at 8E-1 and 8E-2.*

PACIFIC GAS AND ELEC TRIC COMPANY APPENDIX

PSEP																
Filing Line # PSRS	New PSRS	Order S Number	Project Description	Construction Contractor	Mobilization Date	Tie-in date Job	Estimate Amount	Total Cost	Labor Cost N	Naterials Cost C	Contracts Cost C	Other Cost Vari	ance to Budget D		>10% Over Budget	Comments
1 24012	24012	30846923	I-002 L-300B MP 351.8-390.9 UPGRADE PH-1 I-004 L-300A MP 352.3-391.2	GC	25-Apr-12	18-Nov-12 \$	8,079,437.00 \$	7,469,204.54 \$	2,980,197.07 \$	1,734,409.70 \$	1,644,292.17 \$	1,110,305.60 \$	610,232.46 \$		No	
2 24021	24021	30846925	UPGRADE PH-1 R-004 L-142S REPL 1.04mi MP 5.32-	GC	16-May-12	05-Nov-12 \$	6,759,729.00 \$	6,554,811.53 \$	2,759,708.10 \$	1,820,550.34 \$	984,082.55 \$	990,470.54 \$	204,917.47 \$	-	No	
3 23816	23816	30841613	6.35 PH1 R-006 L-111A REPL 8.83MI MP 18.70-	ARB	09-Jul-12	29-Sep-12 \$	5,816,423.00 \$	5,395,373.02 \$	372,021.58 \$	222,956.44 \$	4,659,988.56 \$	140,406.44 \$	421,049.98 \$	1,295,225.21	No	Delayed tie-in from 2012 to 2013 due to additional Integrity Management (IM) tie-
4 23832	26029	30842215	27.54 PH1 R-012 L-167-1 REPL 2.09MI MP 4.45-	Snelson	21-Aug-12	28-Feb-13 \$	34,567,931.00 \$	32,921,161.42 \$	857,146.71 \$	5,588,642.82 \$	24,036,528.02 \$	2,438,843.87 \$	1,646,769.58 \$	344.77	No	in and construction complications including land acquisition delays.
5 23797	23797	30842228	6.55 PH1 R-013 L-210A REPL 0.61MI MP 19.69-	GC	06-Jun-12	22-Sep-12 \$	5,128,244.00 \$	5,638,893.40 \$	1,800,345.00 \$	899,421.19 \$	2,072,888.00 \$	866,239.21 \$	(510,649.40) \$	472.45	Yes	
6 23698	27572	30842237	20.22 PH1 R-017 L-131_2 REPL 0.29MI MP 8.15-	GC	10-Jul-12	30-Aug-12 \$	4,038,841.00 \$	3,967,488.14 \$	1,265,123.57 \$	655,264.49 \$	1,494,826.63 \$	552,273.45 \$	71,352.86 \$	322.59	No	
7 23746	23746	30841475	8.44 PH1	Rockford	02-Aug-12	22-Aug-12 \$	2,497,481.00 \$	2,744,606.69 \$	376,271.29 \$	99,816.67 \$	1,877,967.75 \$	390,550.98 \$	(247,125.69) \$		Yes	
			R-018 L-114_2 REPL 1.72MI MP 9.03-													Delayed tie-in from 2012 to 2013 due to productivity impacts during construction. Job Estimate (JE) created prior to project split into 3 portions for constructability reasons and then allocated to each project based on mileage. However, this method did not take into account the 2 additional mob/de-mob costs, site restoration costs and other site specific conditions that may vary along the line. For
8 23688	26045	30841472	10.52 PH1 R-020 L-181A REPL 1.73mi MP 15.31-	Rockford	21-Sep-12	12-Jan-13 \$	13,961,750.00 \$	16,483,229.05 \$	1,083,483.23 \$	1,989,983.59 \$	12,816,591.13 \$	593,171.10 \$	(2,521,479.05) \$	29,155.85	Yes	the other 2 projects, planned for 2013 and 2014, new JEs will be created.
9 23772	23772		16.81 PH1 R-021 L-109_2A REPL 0.41mi MP	ARB	23-Mar-12	18-May-12 \$	7,832,592.00 \$	6,452,899.93 \$	656,612.08 \$	557,589.28 \$	4,929,084.12 \$	309,614.45 \$	1,379,692.07 \$	3,115.29	No	
10 23724	25722	30891738	11.52-11.93 PH1 R-024 L-103 REPL 0.65MI MP 16.61-	Rockford	11-Jul-12	06-Oct-12 \$	4,415,580.00 \$	3,901,698.01 \$	383,607.35 \$	357,643.85 \$	2,931,291.85 \$	229,154.96 \$	513,881.99 \$	1,217.33	No	Accelerated from 2013 to 2012 for Integrity Management reasons.
11 23728	26001	30842130	19.60 PH1 R-025 L-109 REPL 1.12 MI MP 3.41-	GC	11-Sep-12	09-Nov-12 \$	9,636,306.00 \$	3,992,181.85 \$	736,013.82 \$	409,443.73 \$	2,639,401.66 \$	207,322.64 \$	5,644,124.15 \$		No	Accelerated from 2014 to 2012 for Integrity Management reasons.
12 23365 13 23365	23364 23289	30847129	4.45 Spread 1 R-026 L-109 REPL 0.31MI MP 5.03- 5.34 Spread 2&3	Snelson	08-Aug-12	05-Dec-12 \$	14,840,076.00 \$ 4,201,506.00 \$	14,036,893.44 \$ 5,436,699.25 \$	1,167,334.39 \$ 530,240.52 \$	1,348,604.30 \$ 243,547.33 \$	9,349,312.12 \$ 4,150,041.43 \$	2,171,642.63 \$ 512,869.97 \$	803,182.56 \$	17,666.79	No Yes	
13 23365 14 23365	23295	30839725	R-027 L-109 REPL 1.1 MI MP 5.60-6.72 Spread 4	Snelson Snelson	28-Sep-11 05-Jun-12	11-Apr-12 \$	12,563,093.00 \$	9,962,948.71 \$	704,058.30 \$	970,462.39 \$	7,663,673.91 \$	624,754.11 \$	(1,235,193.25) \$ 2,600,144.29 \$	8,764.41	No	
15 23365	23255		R-028 L-109 REPL 0.53MI MP 7.04- 7.57 Spread S R-030 L-109_3A REPL 1.61mi MP	Snelson	01-May-12	19-Jun-12 \$	8,947,447.00 \$	3,780,766.41 \$	220,523.73 \$	417,249.31 \$	2,896,257.47 \$	246,735.90 \$	5,166,680.59 \$	-	No	
16 23704	26019	30842212	17.01-18.61 PH1	US Pipeline	20-Aug-12	16-Dec-12 \$	19,613,802.00 \$	19,758,400.96 \$	1,985,019.15 \$	1,534,385.66 \$	14,916,410.34 \$	1,322,585.81 \$	(144,598.96) \$	156,915.31	No	Accelerated from 2014 to 2012 for Integrity Management reasons. Accelerated from 2014 to 2012 and replaced with Distribution piping to align with
17 23807	23807	30842178	R-041 DFM-1020-01 REPL 2.69mi MP 0.00-2.69 PH1 8" Dist.	GC	31-May-12	14-Jan-13 \$	2,515,322.00 \$	2,913,090.89 \$	689,110.54 \$	79,883.25 \$	94,369.30 \$	2,049,727.80 \$	(397,768.89) \$	1,517,983.31	Yes	PG&E's commitment to retire or replace 1,200 High Pressure Regulators (HPRs) by the end of 2012.
18 23692	26024	30897895	R-047 L-109_4B REPL 0.47 MI MP 28.21-28.6 PH1	US Pipeline	26-Sep-12	08-Dec-12 \$	4,707,842.00 \$	4,931,206.40 \$	515,974.47 \$	432,082.24 \$	3,706,646.28 \$	276,503.41 \$	(223,364.40) \$	-	No	Accelerated from 2014 to 2012 for Integrity Management reasons.
19 23692	26026	30897897	R-049 L-109_4D REPL 0.67MI MP 32.41-33.08 PH1 R-070 L-103 REPL 0.43MI MP 20.02-	US Pipeline	12-Oct-12	08-Dec-12 \$	6,681,213.00 \$	6,683,520.95 \$	252,280.04 \$	662,244.75 \$	5,537,587.38 \$	231,408.78 \$	(2,307.95) \$	- 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995	No	Accelerated from 2014 to 2012 for Integrity Management reasons. Accelerated from 2014 to 2012 for efficiency reasons to coordinate with General
20 23728	27529	30930685	20.54 PH1	GC	27-Jul-12	30-Aug-12 \$	3,153,155.00 \$	1,441,753.59 \$	311,098.00 \$	171,165.58 \$	683,101.56 \$	276,388.45 \$	1,711,401.41 \$	-	No	Construction (GC) work.
21 23862	23862	30842187	R-071 DFM-1502-08 REPL 0.52MI MP 0.01-0.52 PH1 R-072 DFM-1503-01 DEACTIVATE	GC	29-Oct-12	03-Jan-13 \$	769,377.00 \$	791,978.82 \$	492,440.64 \$	78,177.74 \$	99,676.82 \$	121,683.62 \$	(22,601.82) \$	423,425.36	No	Accelerated from 2014 to 2012 to avoid a pressure reduction and to coordinate with Division work to convert to low pressure main and remove HPRs in 2012.
22 23875	23875	30842188	0.93MI MP 0.00.92 PH1 R-073 L-210A REPL 0.20MI MP 25.41-	GC	20-Sep-12	19-Oct-12 \$	502,904.00 \$	518,231.75 \$	325,176.91 \$	38,614.71 \$	72,511.19 \$	81,928.94 \$	(15,327.75) \$	6,378.04	No	
23 23698	27521	30930082	25.62 PH1	GC	14-Sep-12	27-Nov-12 \$	2,034,035.00 \$	1,648,123.29 \$	811,113.88 \$	307,278.08 \$	230,679.21 \$	299,052.12 \$	385,911.71 \$	-	No	Added post filing to construct new 8" cross tie for L-164 into existing regulator for L
			R-074 L-164 REPL Coalinga Cross Over													300B to provide permanent secondary feed to Coalinga Tap. Also abandon 2100 ft. of L-164. This work was done in conjunction with ILI project I-02 (PSRS 24012). JE was not completed because the estimate for this is included in the JE for I-02 (PSRS
24 N/A	27758	30936321	0.39mi R-075 DFM-1607-01 RIM 204 REPL	GC	16-Jul-12	31-Aug-12 \$	- \$	9,691.09 \$	8,620.46 \$	- \$	- \$	1,070.63 \$	(9,691.09) \$	-	No	24012).
25 24890	27843	30865380	0.63MI MP 0.00-0.63 PH1	GC	26-\$ep-12	05-Nov-12 \$	1,530,747.00 \$	1,771,811.46 \$	868,970.66 \$	64,697.45 \$	632,809.10 \$	205,334.25 \$	(241,064.46) \$	189,794.41	Yes	Accelerated from 2014 to 2012 for Integrity Management reasons.
26 23701	23701	AND AN EXCITATION AND AND AND AND AND AND AND AND AND AN	R-076 DFM-7225-02 RIM 205 REPL Down Rate 2.42MI MP 0.00-2.42 PH1	GC	31-Oct-12	08-Dec-12 \$	3,048,993.00 \$	1,900,005.05 \$	891,225.02 \$	90,376.71 \$	736,960.14 \$	181,443.18 \$	1,148,987.95 \$	179,202.55	No	Accelerated from 2014 to 2012 for Integrity Management reasons.
27 23505 28 23557	26265 25850	41599878	T-013B-12, Line L-109, Daly City T-018-12, Line L-132, San Francisco	ARB ARB	20-Aug-12 28-May-12	08-Nov-12 \$ 11-Jul-12 \$	2,058,891.00 \$ 2,705,882.00 \$	2,224,217.69 \$ 1,979,307.76 \$	321,365.18 \$ 294,064.88 \$	61,403.98 \$ 72,536.61 \$	1,822,497.28 \$ 1,472,360.11 \$	18,951.25 \$ 140,346.16 \$	(165,326.69) \$ 726,574.24 \$	2,201,625.61 1,979,307.76	No No	
29 23511 30 23496	25857 25863	41613029 41617916	T-021-12, Line L-191-1, Pittsburg T-025-12, Line L-100, San Jose	ARB Michels	27-Feb-12 19-Mar-12	30-Mar-12 \$ 07-Jun-12 \$	2,012,197.00 \$ 2,558,935.00 \$	1,732,521.40 \$ 4,735,399.44 \$	376,081.30 \$ 784,535.31 \$	35,385.86 \$ 39,292.26 \$	1,203,354.35 \$ 3,643,940.00 \$	117,699.89 \$ 267,631.87 \$	279,675.60 \$ (2,176,464.44) \$	1,732,521.40 4,644,066.79	No Yes	
31 24537	27746	VIII A REAL AND A	T-025B-11, Line L-132, Santa Clara	Michels	11-Jul-12	27-Aug-12 \$	2,369,526.00 \$	2,685,192.23 \$	117,823.70 \$	30,679.38 \$	1,797,775.90 \$	738,913.25 \$	(315,666.23) \$	1,948,945.14	Yes	Delayed from 2011 to 2012 because the line needed to be placed back in service for Winter Operations.
32 23496 33 23496	25865 25868	41600042 41600043	T-026-12, Line L-100, San Jose T-027-12, Line L-100, Milpitas	Michels Michels	19-Mar-12 19-Mar-12	07-Jun-12 \$ 07-Jun-12 \$	1,919,321.00 \$ 1,741,604.00 \$	1,899,643.76 \$ 1,000,090.48 \$	418,049.22 \$ 188,222.36 \$	28,770.16 \$ 12,967.26 \$	1,355,631.05 \$ 740,029.49 \$	97,193.33 \$ 58,871.37 \$	19,677.24 \$ 741,513.52 \$	1,886,983.96 1,000,090.48	No No	Delayed from 2011 to 2012 because the line and did in the line of the
34 24537	24530	41497347	T-038-11, Line L-132, San Francisco	ARB	14-May-12	12-Jun-12 \$	2,413,312.00 \$	2,825,496.80 \$	449,146.96 \$	42,319.23 \$	2,066,100.45 \$	267,930.16 \$	(412,184.80) \$	2,780,054.60	Yes	Delayed from 2011 to 2012 because the line needed to be placed back in service for Winter Operations.
35 N/A	28473	41801221	T-038B-11, Line L-132, Daly City	Snelson	N/A	25-Feb-13 \$	- 5	32,281.59 \$	28,923.75 \$	- S	3,041.68 \$	316.16 \$	(32,281.59) \$	32,196.19	No	Delayed from 2011 to 2013 and split from T-038-11 (PSRS 24530) to coordinate with the Martin Station Rebuild project because this portion is in the station. No separate JE because this was a joint project.
36 24537	24531		T-039B-11, Line L-132, San Francisco	ARB	28-May-12	11-Jul-12 \$	- > 2,835,566.00 \$	2,532,479.15 \$	570,589.49 \$	- , 50,884.54 \$	1,757,106.56 \$	153,898.56 \$	(32,281.39) \$ 303,086.85 \$	2,532,479.15	No	Delayed from 2011 to 2012 because the line needed to be placed back in service for Winter Operations.
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PSEP								REPOR	TING PERIOD APRIL 1, 20	111 - WARCH 31, 2013						
Filing		Order		Construction											>10% Over	
Line # PSRS	New PSRS	Number	Project Description	Contractor	Mobilization Date	: Tie-in date J	ob Estimate Amount	Total Cost	Labor Cost 1	Materials Cost	Contracts Cost	Other Cost Var	iance to Budget	Disallowed Cost	Budget	Comments
37 23467	25893	41617923	T-040-12, Line DFM-7221-10, Salida/Modesto	ARB	02-Apr-12	29-Apr-12 \$	1,885,158.00 \$	1,367,455.45 \$	268,808.50 \$	64,727.28 \$	984,326.14 \$	49,593.53 \$	517,702.55 \$	1,367,455.00	No	
38 23510	25899	41617925	T-044-12, Line L-138, Fresno	Underground	19-Jun-12	03-Aug-12 \$	2,264,489.00 \$	1,992,510.57 \$	339,909.75 \$	53,328.53 \$	1,542,615.17 \$	56,657.12 \$	271,978.43 \$	1,989,691.24	No	
39 23510	25901	41600052	T-045-12, Line L-138, Fresno	Underground	19-Jun-12	03-Aug-12 \$	2,339,602.00 \$	2,030,439.11 \$	326,844.79 \$	36,073.21 \$	1,533,932.49 \$	133,588.62 \$	309,162.89 \$	1,965,523.66	No	
40 23510	25810	41600054	T-047-12, Line L-138, Fresno	Underground	21-Aug-12	19-Sep-12 \$	1,669,762.00 \$	1,284,794.16 \$	254,433.74 \$	13,242.05 \$	999,620.92 \$	17,497.45 \$	384,967.84 \$	1,283,677.73	No	Delayed from 2011 to 2012 because the line needed to be placed back in service
41 23582	26476	41650674	T-047C-11, Line L-153, Oakland	ARB	23-Jul-12	19-Oct-12 \$	4,148,474.00 \$	1,606,275.99 \$	277,942.33 \$	222,734.97 \$	4,417,345.19 \$	(3,311,746.50) \$	2,542,198.01 \$	1,606,275.99	No	for Winter Operations.
42 23493 43 23493	25812 25816	41617926 41600055	T-048-12, Line L-142N, Bakersfield T-049-12, Line L-142N, Bakersfield	Snelson Snelson	26-Mar-12 26-Mar-12	04-May-12 \$ 04-May-12 \$	2,170,076.00 \$ 2,471,280.00 \$	1,955,152.51 \$ 1,808,153.34 \$	217,107.16 \$ 222,408.26 \$	22,071.39 \$ 28,096,75 \$	1,589,491.57 \$ 1,520,985.54 \$	126,482.39 \$ 36,662.79 \$	214,923.49 \$ 663,126.66 \$	1,950,860.24 1,807,827.48	No No	
44 23495	25810	41617927	T-052-12, Line L-142S, Bakersfield	Michels	04-Jun-12	13-Jul-12 \$	1,555,664.00 \$	1,224,437.80 \$	219,864.40 \$	9,700.65 \$	943,852.06 \$	51,020.69 \$	331,226.20 \$	1,223,538.81	No	
45 23495	25822	41600058	T-053-12, Line L-142S, Bakersfield	Michels	04-Jun-12	13-Jul-12 \$	1,654,964.00 \$	1,328,289.78 \$	236,459.60 \$	6,633.31 \$	1,033,090.73 \$	52,106.14 \$	326,674.22 \$	1,328,160.29	No	
46 23495 47 23497	25824 25826	41600059 41617928	T-054-12, Line L-142S, Bakersfield T-055-12, Line L-300A, Tehachapi	Michels ARB	02-Jul-12 01-Aug-12	25-Jul-12 \$ 07-Sep-12 \$	1,645,362.00 \$ 1,926,659.00 \$	1,154,990.69 \$ 1,713,228.45 \$	272,568.84 \$ 276,210.53 \$	18,646.61 \$ 32,170.32 \$	804,924.76 \$ 1,333,482.42 \$	58,850.48 \$ 71,365.18 \$	490,371.31 \$ 213,430.55 \$	1,154,845.46 1,703,185.93	No No	
	23020	4101/520	T-057E-11, Line L-300A, San	<i>Find</i>	01 706 12	0, 30p 12 - 2	1,520,055.00 7	1,713,220.45 5	270,210.55	52,170.52 5	1,555,462.42 \$,1,505.10 5	213,430.55 \$	1,705,105.55		
48 24495	24499	41497315	Bernardino	Snelson	07-Feb-12	22-Mar-12 \$	4,785,929.00 \$	2,262,637.43 \$	386,942.14 \$	132,811.05 \$	3,496,479.04 \$	(1,753,594.80) \$	2,523,291.57 \$	2,257,937.41	No	Delayed from 2011 to 2012 due to difficulty in obtaining a required permit.
																Delayed from 2011 to 2012 due to difficulty in obtaining a required permit. Project split into East and West portions after JE was completed for constructability
49 23497	26783	41663877	T-057W-11, Line L-300A, Kern	Snelson	07-Feb-12	22-Mar-12 \$	- ş	2,258,172.93 \$	7,568.13 \$	- \$	345,420.21 \$	1,905,184.59 \$	(2,258,172.93) \$	2,257,846.29	No	reasons. JE recorded with E portion.
50 23497	25830	41600062	T-059-12, Line L-300A, Bakersfield	ARB	06-Jul-12	28-Jul-12 \$	1,568,054.00 \$	1,388,171.25 \$	212,603.46 \$	74,633.38 \$	1,055,931.04 \$	45,003.37 \$	179,882.75 \$	1,387,680.94	No	
51 23497	25394	41587447	T-061-12, Line L-300A, Coalinga	Snelson	09-Jan-12	30-Jan-12 \$		2,866,128.72 \$	196,914.52 \$	34,730.22 \$	2,557,672.91 \$	76,811.07 \$	(2,866,128.72) \$	2,866,128.72	No	JE consolidated within 2011 program authorization.
52 23535	25849	41600067	T-073-12, Line L-021F, San Rafael	ARB	17-Apr-12	22-May-12 \$	2,390,861.00 \$	2,321,516.11 \$	588,088.02 \$	28,511.08 \$	1,514,960.20 \$	189,956.81 \$	69,344.89 \$	2,321,516.11	No	
53 23552 54 23525	25858 25877	41617940 41617945	T-079-12, Line L-119A, Davis T-089-12, Line L-210B, Fairfield	ARB	20-Jul-12 01-Aug-12	07-Sep-12 \$ 05-Oct-12 \$		2,483,721.12 \$ 1,868,698.86 \$	527,652.57 \$ 348,210.75 \$	24,191.52 \$ 22,283.60 \$	1,746,000.65 \$ 1,451,373.14 \$	185,876.38 \$ 46,831.37 \$	(90,219.12) \$ 872,993.14 \$	2,475,274.87 1,868,698.86	No No	
54 23525 55 23525	25877	41617945	T-090-12, Line L-210B, Fairfield	ARB	01-Aug-12 01-Aug-12	05-Oct-12 \$	3,408,582.00 \$	2,960,392.18 \$	486,228.90 \$	30,522.82 \$	2,364,209.55 \$	46,831.37 \$ 79,430.91 \$	448,189.82 \$	2,922,785.24	No	
56 23525	25881	41600074	T-091-12, Line L-210B, Fairfield	ARB	29-Aug-12	24-Oct-12 \$	2,732,533.00 \$	2,312,118.25 \$	532,940.00 \$	26,316.22 \$	1,732,633.60 \$	20,228.43 \$	420,414.75 \$	2,312,118.25	No	
57 23525	25883	41600075	T-092-12, Line L-210B, Napa	ARB	25-Sep-12	15-Oct-12 \$	1,855,572.00 \$	1,532,937.66 \$	286,007.14 \$	27,462.87 \$	1,159,435.21 \$	60,032.44 \$	322,634.34 \$	1,531,780.98	No	Accelerated from 2013 to 2012 in order to (along with T-101-12) lift a pressure
																reduction on the line. Also accelerated to spread out the scheduling of the 3 tests
			T-096-12, Line DFM-1816-01, Santa													on this line due to the very large quantities of Liquefied Natural Gas (LNG) required
58 23929	25890	41600077	Cruz	Underground	26-Jun-12	27-Jul-12 \$	2,131,348.00 \$	3,501,272.39 \$	1,192,874.78 \$	73,987.31 \$	2,063,598.85 \$	170,811.45 \$	(1,369,924.39) \$	3,501,272.39	Yes	to support customers during the tests. Delayed from 2011 to 2012 because the line needed to be placed back in service
																for Winter Operations. Test is needed to raise the pressure of the line, but is a non
59 23513	25892	41617948	T-097-12, Line L-148, Modesto	Snelson	05-Mar-12	03-Apr-12 \$	2,298,717.00 \$	2,142,006.45 \$	227,191.31 \$	23,818.92 \$	1,787,406.42 \$	103,589.80 \$	156,710.55 \$	2,138,879.35	No	High Consequence Area (HCA) making the delay possible.
																Delayed from 2011 to 2012 because the line needed to be placed back in service for Winter Operations. Test is needed to raise the pressure of the line, but is a non
60 23513	25898	41600079	T-099-12, Line L-148, Modesto	Snelson	22-Mar-12	24-Apr-12 \$	2,149,207.00 \$	1,773,705.30 \$	373,354.24 \$	39,380.90 \$	1,309,823.11 \$	51,147.05 \$	375,501.70 \$	1,773,025.80	No	HCA making the delay possible.
61 24204	24204	41482858	T-10 L-105C MP 0 to MP 1.76	ARB	11-Aug-11	31-Aug-11 \$	- s	2,046,482.42 \$	197,528.27 \$	76,953.92 \$	1,683,901.33 \$	88,098.90 \$	(2,046,482.42) \$	2,046,482.42	No	JE consolidated within 2011 program authorization.
																Delayed from 2011 to 2012 because the line needed to be placed back in service for Winter Operations. Test is needed to raise the pressure of the line, but is a non
62 23513	25900	41600080	T-100-12, Line L-148, Modesto	Snelson	13-Apr-12	19-May-12 \$	2,049,661.00 \$	2,171,301.18 \$	390,550.97 \$	15,394.95 \$	1,716,687.76 \$	48,667.50 \$	(121,640.18) \$	2,167,476.58	No	HCA making the delay possible.
																Delayed from 2012 to 2013 to allow more time to coordinate with the customer
63 23905	25904	41622643	T-101-12, Line DFM-3010-01, Antioch	ARB	21-Jan-13	04-Feb-13 \$	1,664,377.00 \$	995,733.84 \$	321,654.36 \$	5,569.79 \$	670,914.76 \$	(2,405.07) \$	668,643.16 \$	954,167.97	No	who will need to have a planned shutdown on the line to allow the hydrotest.
64 23548	25908	*****	T-102D-12, Line L-118A, Chowchilla	Michels	23-May-12	19-Jun-12 \$	2,001,000,000 ¢	940,071.22 \$	185,249.53 \$	11,033.11 \$	735,937.56 \$	7,851.02 \$	667,627.78 \$	940,071.22	No	
65 23548 66 24537	25913 25917	41622649 41622651	T-102F-12, Line L-118A, Merced T-104-12, Line L-132, San Carlos	Michels ARB	08-Jun-12 26-Jul-12	10-Jul-12 \$ 27-Sep-12 \$	1,915,883.00 \$ 3,466,093.00 \$	1,304,957.54 \$ 3,519,086.50 \$	197,688.76 \$ 753,098.23 \$	10,021.38 \$ 80,065.00 \$	1,088,701.88 \$ 2,431,569.34 \$	8,545.52 \$ 254,353.93 \$	610,925.46 \$ (52,993.50) \$	1,304,944.25 3,519,086.50	No No	Delayed from 2011 to 2012 due to difficulty in obtaining a required permit.
67 23513	26090	PROFESSION OF STREET, SAME AND ADDRESS OF STREET, SAME	T-109 E/W L-148 MP 0 to MP 17.63	Snelson	17-Oct-11	03-Nov-11 \$	- \$	1,829,025.09 \$	205,158.95 \$	29,890.44 \$	1,414,974.56 \$	179,001.14 \$	(1,829,025.09) \$	1,829,025.09	No	JE consolidated within 2011 program authorization.
68 24560	24206	41482920	T-11 L-105N MP 11.07 to MP 11.86	ARB	11-May-11	12-Jun-11 \$	· - \$	986,694.18 \$	183,657.48 \$	36,177.07 \$	730,883.13 \$	35,976.50 \$	(986,694.18) \$	986,694.18	No	JE consolidated within 2011 program authorization.
69 23497	25926	41622656	T-110-12, Line L-300A, Hollister	H&M	06-Aug-12	31-Aug-12 \$	3,119,057.00 \$	2,729,371.13 \$	403.492.03 \$	22,841.73 \$	2,183,314.97 \$	119,722.40 \$	389,685.87 \$	2,729,371.13	No	Delayed from 2011 to 2012 because this section of the line is not Priority 1 for Hydrotest 2011 due to class location (1 or 2).
70 24555	24555	41497367	T-112 L-191 MP 9.44 to MP 10.57	ARB	10-Oct-11	15-Nov-11 \$	www.com/www.wooccovvvno.fandatzwawiwecovvaluata/tristatur.com/aaa	1,394,756.67 \$	103,262.89 \$	37,894.45 \$	1,155,111.47 \$	98,487.86 \$	(1,394,756.67) \$	1,394,756.67	No	JE consolidated within 2011 program authorization.
			T-116A L-300A MP 267.935 to MP													Accelerated from 2012 to 2011 because Hydrotest 2011 identified this section as Priority 1, needing to be tested in 2011. JE consolidated within 2011 program
71 23497	26088	41474039	269.833	Snelson	26-Oct-11	21-Nov-11 \$	\$	3,019,545.36 \$	253,124.37 \$	35,379.84 \$	2,622,541.38 \$	108,499.77 \$	(3,019,545.36) \$	3,019,545.36	No	authorization.
																Accelerated from 2012 to 2011 because Hydrotest 2011 identified this section as
72 23497	26088	41474039	T-116B L-300A MP 267.935 to MP 269.833	Snelson	26-Oct-11	21-Nov-11 \$	- See T	-116B See	e T-116B See	e T-116B See	T-116B See	e T-116B See	T-116B See	e T-116B	No	Priority 1, needing to be tested in 2011. JE consolidated within 2011 program authorization.
12 25451	20000	41474055	203.035	Sileison	20 000 11	21100111 9	, See 1	1105 Sec		Sec.	1105 500	Sec.	1105 50		110	Added project separate from filing because the line met the Hydrotest 2011
					17.0.144					internal at			14 100 000 111 A			criteria to be tested as Priority 1. JE consolidated within 2011 program
73 N/A	25340	41545511	T-117 L-300B MP 283 50 to MP 284.56	Snelson	17-Oct-11	31-0ct-11 \$	\$	1,481,880.44 \$	46,519.88 \$	(512.41) \$	1,224,051.49 \$	211,821.48 \$	(1,481,880.44) \$	1,481,880.44	No	authorization. Accelerated from 2012 to 2011 due to location in San Bruno. JE approval
74 23557	26104	41613031	T-12017 L-132 MP 40.04 TO MP 40.08	ARB	15-Nov-11	22-Nov-11 \$	- \$	15,738.20 \$	- \$	135.27 \$	15,597.30 \$	5.63 \$	(15,738.20) \$	15,738.20	No	consolidated within 2011 program authorization.
			T-12056 T-118A/B L-300A MP 239.57													Accelerated from 2012 to 2011 because Hydrotest 2011 identified this section as
75 23497	25393	41587446	to MP 244.03	Snelson	03-Nov-11	21-Nov-11 \$	s	4,136,927.29 \$	83,223.18 \$	3,171.20 \$	3,870,800.16 \$	179,732.75 \$	(4,136,927.29) \$	4,136,927.29	No	Priority 1, needing to be tested in 2011. JE consolidated within 2011 program authorization.
																Accelerated from 2012 to 2011 because Hydrotest 2011 identified this section as
76 23497	25395	41587448	T12062 L-300A MP 384.398 to MP 385.456	Snelson	07-Nov-11	19-Nov-11 \$	- Ś	1,688,286.25 \$	42,481.67 \$	15,284.32 \$	1,579,566.58 \$	50,953.68 \$	(1,688,286.25) \$	1,688,286.25	No	Priority 1, needing to be tested in 2011. JE consolidated within 2011 program authorization.
, , , , , , , , , , , , , , , , , , ,			5551155	Shelson	57 1109-11		د	1,000,200.23 \$	·2,702.07 7		2,575,505.50 \$	50,555.00 \$	(1,000,200,25) \$	-,000,200.23		Added project post filing because the line met Hydrotest 2011 criteria. JE
			T-121 L-303 MP 26.555 to MP 27.672	ARB	02-Nov-11	19-Nov-11 \$	- \$	1,810,507.37 \$	150,789.90 \$	17,337.45 \$	1,493,395.24 \$	148,984.78 \$	(1,810,507.37) \$	1,810,507.37	No	consolidated within 2011 program authorization.
77 N/A	25770	41592685	T 133 DEM 0344 04 ME 5 5 5				- \$	248,258.23 \$	100,235.01 \$	5,622.37 \$	142,226.35 \$	174.50 \$	(248,258.23) \$	248,258.15	No	Accelerated from 2014 to 2011 due to the proximity to other work so a single clearance could be taken. JE consolidated within 2011 program authorization.
			T-122 DFM 0211-01 MP 0.0 to MP 0.74	ARB	27-Oct-11	29-0ct-11 S				-,		Ç 9512	,,, J			
77 N/A 78 23566	25770 25459	41592685 41598529	T-122 DFM 0211-01 MP 0.0 to MP 0.74	ARB	27-Oct-11	29-Oct-11 \$										Delayed from 2011 to 2012 in order to combine work for efficiency reasons with a
78 23566	25459	41598529	0.74								201200		1 200 200			valve installation on the expansion loop which needed to be completed during
				ARB GC/Snelson ARB	13-Feb-12	29-Oct-11 \$ 28-Mar-12 \$ 16-Sep-11 \$		444,162.35 \$ 2,002,965.70 \$	148,670.68 \$ 133,989.24 \$	660.60 \$ 186,693.96 \$	261,393.88 \$ 1,549,537.48 \$	33,437.19 \$ 132,745.02 \$	1,298,883.65 \$ (2,002,965.70) \$	444,162.35 2,002,965.70	No	valve installation on the expansion loop which needed to be completed during winter to avoid thermal expansion of the pipe.
78 23566 79 24521	25459 25928	41598529 41617909 41497369 41497370	0.74 T-122-12, Line L-3008, Topock	GC/Snelson		28-Mar-12 \$	1,743,046.00 \$				261,393.88 \$ 1,549,537.48 \$ 1,203,537.77 \$ 2,632,427.32 \$		1,298,883.65 \$ (2,002,965.70) \$ (1,410,399.37) \$ (3,354,461.68) \$	444,162.35 2,002,965.70 1,410,399.37 3,354,461.68		valve installation on the expansion loop which needed to be completed during

PSEP Filing		Order		Construction											>10% Over	
Line # PSRS 83 23694	New PSRS 25467	5 Number 41687447	Project Description T-172-12, Line L-131, Livermore	Contractor H&M	Mobilization Date 19-Jul-12		Job Estimate Amount \$ 1,743,353.00 \$	Total Cost 1,560,915.83 \$	Labor Cost 336,527.31 \$		Contracts Cost 1,125,357.36 \$		ance to Budget D 182,437.17 \$	isallowed Cost 1,560,915.83	Budget No	Comments Added new test from Replacement workstream. Not PSEP funded.
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		T-173-12, Line DFM-7219-01,													Added new test non-PSEP funded to restore the pressure of the system between DFM7219-01 and L-148 prior to winter in 2012 and replacement project filed for
84 23695	27568	41699030	Modesto	H&M	07-Aug-12	31-Aug-12	\$ 2,122,885.00 \$	1,851,883.95 \$	395,780.10 \$	13,480.67 \$	1,437,363.82 \$	eren eren eren anderen eren eren eren eren eren eren ere	271,001.05 \$	-	No	2014 removed.
85 N/A 86 23724	27772 28279	41712455 41748986	T-176-12, Line L-301F, Marina T-182-12, Line L-109, Milpitas	SE Pipe Line GC/M	09-Aug-12 19-Sep-12	25-Aug-12 26-Oct-12	\$ 1,681,031.00 \$ \$ 915,035.00 \$	1,253,028.74 \$ 769,695.62 \$	242,606.41 \$ 259,846.10 \$	18,971.90 \$ 20,723.13 \$	974,858.78 \$ 453,034.46 \$	16,591.65 \$ 36,091.93 \$	428,002.26 \$ 145,339.38 \$	- 735,011.98	No No	Added test to ensure pressure restoration. Not PSEP funded. Added for Integrity Management reasons.
																Delayed from 2011 to 2012 because this section of the line had a previous test that met the standard at the time it was conducted so it could be delayed for
87 24521	28448	41758570	T-183-12, Line L-300B, Barstow	Michels	13-Nov-12	14-Dec-12	\$ 2,326,473.00 \$	2,517,587.71 \$	612,933.54 \$	19,758.65 \$	1,862,927.76 \$	21,967.76 \$	(191,114.71) \$	2,517,587.71	No	prioritization reasons, but was then IM flagged in 2012.
																Added new Test project in 2011 and filed Replacement project was cancelled because after filing was written it was identified that the specifications of this pipe
																met the criteria for testing in 2011. JE consolidated within 2011 program
88 24084 89 23500	24703 23500	41502566 41474062	T-19 L-114 MP 16.51 to MP 16.5736 T-2 L-101 MP 2.45 to MP 2.65	ARB	30-Aug-11 23-May-11	20-Sep-11 11-Jun-11	\$-\$ \$-\$	1,457,184.27 \$ 2,617,589.63 \$	239,500.68 \$ 328,723.40 \$	45,690.73 \$ 104,497.87 \$	1,161,031.23 \$ 2,068,767.63 \$	Contractory and an and a second s	(1,457,184.27) \$ (2,617,589.63) \$	1,457,184.27 2,617,589.63	No No	authorization. JE consolidated within 2011 program authorization.
90 23554	24702	41502565	T-20 L-131 MP 42.35 to MP 42.38	ARB	14-Jul-11	30-Jul-11		1,247,909.44 \$	224,840.71 \$	14,731.37 \$	978,821.76 \$	29,515.60 \$	(1,247,909.44) \$	1,247,909.44	No	JE consolidated within 2011 program authorization.
91 23554 92 23554	24486 24486	41497302 41502562	T-22N L-131 MP 50.57 to MP 51.42 T-22S L-131 MP 51.42 to MP 55.88	ARB ARB	17-Sep-11 17-Sep-11	21-Oct-11 21-Oct-11	\$ - \$ \$ - See	2,321,355.27 \$ T-22N See	253,480.89 \$ T-22N Se		1,840,540.44 \$ T-22N Se	104,555.25 \$ ee T-22N See T	(2,321,355.27) \$ 22N See	2,321,355.27 T-22N	No No	JE consolidated within 2011 program authorization. JE consolidated within 2011 program authorization.
93 24699	24699	41502562	T-23 L-131 MP 57.46 to MP 57.47	ARB	24-May-11	25-May-11	s <u>-</u> s	35,051.33 \$	5,912.86 \$	conversion and a second s	29,123.32 \$		(35,051.33) \$	35,051.33	No	JE consolidated within 2011 program authorization.
94 24537 95 24537	24545 23508	41497359 41474078	T-24 L-132 MP 0.7426 to MP 1.87 T-25 L-132 MP 3.05 to MP 4.92	ARB ARB	03-Oct-11 06-Jun-11	25-Oct-11 22-Jun-11	s - s s - s	1,629,398.92 \$ 3,290,300.33 \$	135,720.82 \$ 1,094,395.76 \$	10000-010000-0010-00-040-010-010-010-010	1,352,211.37 \$ 2,239,811.84 \$		(1,629,398.92) \$ (3,290,300.33) \$	1,629,398.92 3,290,300.33	No No	JE consolidated within 2011 program authorization. JE consolidated within 2011 program authorization.
96 24537	24529	41497346	T-26 L-132 MP 4.92 to MP 7.06	ARB	24-Aug-11	17-Oct-11	\$ - \$	1,644,554.96 \$	243,919.83 \$	15,776.09 \$	1,307,309.20 \$	77,549.84 \$	(1,644,554.96) \$	1,644,554.96	No	JE consolidated within 2011 program authorization.
97 24537 98 24537	24538 24535	41497354 41497352	T-27 L-132 MP 7.06 to MP 8.54 T-28 L-132 MP 8.54 to MP 10.32	ARB ARB	17-Aug-11 12-Jul-11	14-Sep-11 18-Aug-11	s - s \$ - \$	5,058,870.99 \$ 3,084,403.52 \$	204,012.79 \$ 216,114.72 \$		4,634,815.96 \$ 2,724,038.03 \$	88,222.62 \$ 138,525.59 \$	(5,058,870.99) \$ (3,084,403.52) \$	5,058,870.99 3,084,403.52	No No	JE consolidated within 2011 program authorization. JE consolidated within 2011 program authorization.
99 24537	24533	41497350	T-29 L-132 MP 10.32 to MP 13.95	ARB	01-Aug-11	19-Sep-11	s - s	2,582,177.84 \$	137,818.91 \$		2,320,593.69 \$		(2,582,177.84) \$	2,582,177.84	No	JE consolidated within 2011 program authorization.
100 23500 101 24537	24526 24534	41497342 41497351	T-3 L-101 MP 3.39 to MP 3.4775 T-30 L-132 MP 13.95 to MP 18.4621	ARB ARB	23-May-11 05-Aug-11	11-Jun-11 18-Nov-11	s - s \$ - \$	160,113.51 \$ 6,262,065.50 \$	5,074.52 \$ 462,609.03 \$		154,475.89 \$ 5,360,443.95 \$	563.10 \$ 340,936.36 \$	(160,113.51) \$ (6,262,065.50) \$	160,113.51 6,262,065.50	No No	JE consolidated within 2011 program authorization. JE consolidated within 2011 program authorization.
102 24537	24532	41497349		ARB	08-Aug-11	18-Nov-11	\$-\$	4,597,286.93 \$	358,739.91 \$	NAMES OF THE OWNER	3,989,065.29 \$	213,256.88 \$	(4,597,286.93) \$	4,597,286.93	No	JE consolidated within 2011 program authorization.
103 24537 104 24537	24537 24541	41497353 41497356		ARB ARB	22-Aug-11 31-Aug-11	18-Nov-11 17-Nov-11		2,441,804.11 \$ 3,713,092.54 \$	183,532.67 \$ 416,726.56 \$		2,098,299.34 \$ 2,833,906.20 \$	145,171.43 \$ 354,033.00 \$	(2,441,804.11) \$ (3,713,092.54) \$	2,441,804.11 3,713,092.54	No No	JE consolidated within 2011 program authorization. JE consolidated within 2011 program authorization.
105 24537	24539		T-34 L-132 MP 30.9595 to MP 34.49	ARB	31-Aug-11	17-Nov-11	s - s	3,702,383.41 \$	191,388.87 \$	57,093.01 \$	3,044,808.63 \$	409,092.90 \$	(3,702,383.41) \$	3,702,383.41	No	JE consolidated within 2011 program authorization.
106 24537	24543	41497357	T-35 L-132 MP 34.49 to MP 38.39	ARB	02-Sep-11	17-Nov-11	s - s	4,894,181.53 \$	178,062.21 \$	105,349.51 \$	4,305,436.12 \$	305,333.69 \$	(4,894,181.53) \$	4,894,181.53	No	JE consolidated within 2011 program authorization.
107 24537	24479	41497344	T-36A L-132 MP 40.0837 to MP 42.34	ARB	18-May-11	22-Nov-11	<u> </u>	1,381,531.65 \$	110,597.21 \$	57,436.17 \$	1,194,740.33 \$	18,757.94 \$	(1,381,531.65) \$	1,381,531.65	No	JE consolidated within 2011 program authorization.
108 24537	24481	41497345	T-36B L-132 MP 42.34 to MP 43.6131	ARB	18-May-11	22-Nov-11	\$- <u>\$</u>	218,594.80 \$	62,984.86 \$	1,564.22 \$	155,629.21 \$	(1,583.49) \$	(218,594.80) \$	218,594.80	No	JE consolidated within 2011 program authorization.
109 23480	24655	41474079	T-40 L-132A MP 0.0057 to MP 1.4589	ARB	26-Apr-11	25-May-11	\$-S	2,047,232.07 \$	386,188.74 \$	221,399.23 \$	1,359,875.09 \$	79,769.01 \$	(2,047,232.07) \$	2,047,232.07	No	JE consolidated within 2011 program authorization.
110 23480	24697	41502561	T-41 L-132A MP 1.4589 to MP 1.4659	ARB	26-Apr-11	25-May-11	s - s	141,910.87 \$	199.82 \$	- Ś	141,700.79 \$	10.26 \$	(141,910.87) \$	141,910.87	No	JE consolidated within 2011 program authorization.
111 24548	23512	41474081	T-42 L-147 MP 0.17 to MP 1.1321	ARB	06-Sep-11	29-Oct-11	to any one of the second s	3,557,479.33 \$	198,960.03 \$	61,393.15 \$	3,282,825.62 \$	14,300.53 \$	(3,557,479.33) \$	3,557,479.33	No	JE consolidated within 2011 program authorization.
112 24548 113 24548	24547 24548	41497360 41497361	T-43A L-147 MP 1.1321 to MP 2.2 T-43B L-147 MP 2.2 to MP 3.4	ARB ARB	06-Sep-11 06-Sep-11	29-Oct-11 29-Oct-11		745,616.73 \$ 616,675.63 \$	245,824.76 \$ 28,526.04 \$	WARE WARE A REPORT OF THE R	525,904.24 \$ 454,625.34 \$		(745,616.73) \$ (616,675.63) \$	745,616.73 616,675.63	No No	JE consolidated within 2011 program authorization. JE consolidated within 2011 program authorization.
114 24554	24553	41497365	T-44 L-153 MP 0 to MP 3.58	ARB	12-Jul-11	06-Aug-11	\$ - \$	2,898,989.55 \$	313,328.59 \$	51,447.55 \$	2,372,741.24 \$	161,472.17 \$	(2,898,989.55) \$	2,898,989.55	No	JE consolidated within 2011 program authorization.
115 24554 116 24554	23519 24550	41474085 41497362	T-45 L-153 MP 9.2 to MP 13.62 T-46 L-153 MP 13.62 to MP 17.6	ARB ARB	03-Jun-11 04-Jun-11	11-Jul-11 14-Jul-11		2,505,758.56 \$ 2,226,619.72 \$	260,879.83 \$ 89,502.50 \$	and a second	1,931,541.43 \$ 2,078,839.90 \$		(2,505,758.56) \$ (2,226,619.72) \$	2,505,758.56 2,226,619.72	No No	JE consolidated within 2011 program authorization. JE consolidated within 2011 program authorization.
117 24554	24551	41497363	T-47A L-153 MP 17.65 to MP 20.07	ARB	30-Jun-11	02-Aug-11	s - s	3,311,478.55 \$	366,280.68 \$	51,786.57 \$	2,734,905.89 \$	158,505.41 \$	(3,311,478.55) \$	3,311,478.55	No	JE consolidated within 2011 program authorization.
118 24554	24552	41497364	T-47B L-153 MP 20.07 to MP 22.87	ARB	28-Sep-11	20-Nov-11	s - s	4,191,439.07 \$	299,999.43 \$	54,986.35 \$	3,401,850.45 \$	434,602.84 \$	(4,191,439.07) \$	4,191,439.07	No	JE consolidated within 2011 program authorization.
119 24555	23526	41474088	T-49 E/W L-191 MP 6.4753 to MP 9.44 T-51 L-300A MP 121.8722 to MP	ARB	28-Sep-11	15-Nov-11	s - s	2,802,430.13 \$	394,488.16 \$	154,146.26 \$	2,124,000.54 \$	129,795.17 \$	(2,802,430.13) \$	2,802,430.13	No	JE consolidated within 2011 program authorization.
120 24495	23543	41474053	122.6788	Snelson	20-May-11	12-Jun-11	\$-\$	4,645,152.38 \$	672,158.58 \$	368,045.58 \$	3,442,427.72 \$	162,520.50 \$	(4,645,152.38) \$	4,645,152.38	No	JE consolidated within 2011 program authorization.
121 24495	24487	41497303	T-52 L-300A MP 127.0327 to MP 127.9306	Snelson	20-May-11	12-Jun-11	s - s	2,224,852.08 \$	8,605.97 \$	53,072.11 \$	2,165,018.21 \$	(1,844.21) S	(2,224,852.08) \$	2,224,852.08	No	JE consolidated within 2011 program authorization.

122 24495 123 24495	24506 24507		T-54 L-300A MP 151.066 to MP 156.4 T-55 L-300A MP 156.4 to MP 157.86	Snelson Snelson	06-Sep-11 06-Sep-11	04-Oct-11 04-Oct-11		1,287,122.64 \$ 1,205,631.46 \$	118,702.86 \$ 91,798.97 \$	AND REAL PROPERTY AND REAL PROPERTY AND REAL PROPERTY AND REAL PROPERTY.	1,084,059.56 \$ 1,002,177.00 \$	NORMATING AND	(1,287,122.64) \$ (1,205,631.46) \$	1,287,122.64 1,205,631.46	No No	JE consolidated within 2011 program authorization. JE consolidated within 2011 program authorization.
	24508	41497324	T-56 L-300A MP 157.86 to MP	Caslas												IF concelled the 2011 program authorization
124 24495	24508	41497324	160.1392 T-60 L-300A MP 256.22 to MP	Snelson	06-Sep-11	04-Oct-11	\$ - \$	2,432,671.41 \$	135,078.44 \$	77,231.68 \$	2,216,889.11 \$	3,472.18 \$	(2,432,671.41) \$	2,432,671.41	No	JE consolidated within 2011 program authorization.
125 24495	24502	41497318	257.0763 T-62 L-300A MP 345.02 to MP	Snelson	29-Jul-11	12-Aug-11	\$ - \$	2,145,025.30 \$	173,131.04 \$	59,025.87 \$	1,831,958.56 \$	80,909.83 \$	(2,145,025.30) \$	2,145,025.30	No	JE consolidated within 2011 program authorization.
126 24495	24491	41497307	345.2571	Snelson	16-Jun-11	30-Jun-11	\$ - \$	2,897,357.98 \$	222,473.97 \$	63,553.79 \$	2,611,260.16 \$	70.06 \$	(2,897,357.98) \$	2,897,357.98	No	JE consolidated within 2011 program authorization.
127 24495	24490	41497306	T-63 L-300A MP 353.56 to MP 353.85	Snelson	16-Jun-11	30-Jun-11	s - s	1,733,471.37 \$	152,258.41 \$	1,522.17 \$	1,582,970.89 \$	(3,280.10) \$	(1,733,471.37) \$	1,733,471.37	No	JE consolidated within 2011 program authorization.
128 24495 129 24495	24504 24488	41497320 41497304	T-64 L-300A MP 414.92 to MP 416.016 T-65A L-300A MP 450 to MP 450.83	Snelson Snelson	19-Nov-11 13-Sep-11	08-Dec-11 28-Sep-11		2,391,880.38 \$ T-65B See	186,144.08 \$ T-65B Se	NAMES AND ADDRESS OF A DESCRIPTION OF A	2,146,572.14 \$ T-65B Se	29,064.16 \$ ee T-65B See T	(2,391,880.38) \$ -65B See	2,391,880.38 F-65B	No No	JE consolidated within 2011 program authorization. Removed from Phase 1 (PH1) due to records verified.
	25926	41497305	T-65B L-300A MP 445.705 to MP 446.48					3,253,480.95 \$	144,613.80 \$		2,996,028.61 \$		(134,423.95) \$	3,253,480.95	No	Delayed from 2011 to 2012 because this section of the line is not Priority 1 for
			T-67A L-300A MP 472.1279 to MP	Snelson	06-Sep-11						in a substant				ONI	Hydrotest 2011 due to class location (1 or 2).
131 24495	24511	41497327	478.0014 T-67B L-300A MP 472.1279 to MP	Snelson	30-Sep-11	27-0ct-11	\$ - \$	2,605,955.47 \$	277,601.26 \$	49,821.32 \$	2,187,807.14 \$	90,725.75 \$	(2,605,955.47) \$	2,605,955.47	No	JE consolidated within 2011 program authorization.
132 24495	24511	41497327	478.0014	Snelson	30-Sep-11	27-Oct-11	\$-See	T-67A See	T-67A Se	ee T-67A See	: T-67A Se	ee T-67A See T	-67A See	Г-67А	No	JE consolidated within 2011 program authorization.
133 24495	24509	41497325	T-68 L-300A MP 480.9574 to MP 483.7391	Snelson	15-0ct-11	09-Nov-11	s - s	2,358,473.74 \$	217,874.48 \$	28,420.99 \$	1,962,693.37 \$	149,484.90 \$	(2,358,473.74) \$	2,358,473.74	No	JE consolidated within 2011 program authorization.
134 23542	23542	41474064	T-7 L-105A MP 38 to MP 41	ARB	26-Aug-11	05-Oct-11		3,530,547.68 \$	381,534.88 \$		2,958,843.63 \$	50,098.36 \$	(3,530,547.68) \$	3,530,547.68	No	JE consolidated within 2011 program authorization.
135 24495	24496	41497312	T-70 L-300A MP 488.7782 to MP 490.59	Snelson	12-Jul-11	08-Aug-11	\$ - \$	1,854,556.92 \$	99,592.72 \$	26,195.51 \$	1,585,737.03 \$	143,031.66 \$	(1,854,556.92) \$	1,854,556.92	No	JE consolidated within 2011 program authorization.

PSEP								ile on	TING PERIOD APRIL 1, 203							
Filing Line # PSRS	New PSRS	Order Number	Project Description	Construction Contractor	Mobilization Date	Tie-in date J	ob Estimate Amount	Total Cost	Labor Cost N	aterials Cost	Contracts Cost	Other Cost Var	iance to Budget	Disallowed Cost	>10% Over Budget	Comments
			T-71 L-300A MP 490.59 to MP													
136 24495	24497	41497313	493.0078	Snelson	28-Jun-11	08-Aug-11 \$		2,395,824.59 \$	157,052.19 \$	9,018.10 \$	2,113,873.77 \$	115,880.53 \$	(2,395,824.59) \$	2,395,824.59	No	JE consolidated within 2011 program authorization.
137 24495	24494	41497310	T-72 L-300A MP 493.58 to MP 495.86	Snelson	23-Jun-11	08-Aug-11 \$	- \$	3,062,120.96 \$	88,791.02 \$	2,165.96 \$	2,967,978.72 \$	3,185.26 \$	(3,062,120.96) \$	3,062,120.96	No	JE consolidated within 2011 program authorization.
138 24495	24492	41497308	T-73 L-300A MP 496.36 to MP 499.96	Snelson	12-Jul-11	08-Aug-11 \$; - \$	1,764,838.44 \$	64,556.28 \$	50,718.40 \$	1,459,948.30 \$	189,615.46 \$	(1,764,838.44) \$	1,764,838.44	No	JE consolidated within 2011 program authorization.
139 24495	24493	41497309	T-74 L-300A MP 499.96 to MP 502.23	Snelson	12-Jul-11	08-Aug-11 \$. <u>-</u> s	2,851,049.93 \$	70,499.35 \$	38,859.96 \$	2,697,789.10 \$	43,901.52 \$	(2,851,049.93) \$	2,851,049.93	No	JE consolidated within 2011 program authorization.
140 24492	23546	41474054	T-75 L-300A-1 MP 156.4 to MP 157.0092	Snelson	06-Sep-11	04-Oct-11 \$	- \$	873,909.67 \$	47,741.77 \$	- \$	827,043.13 \$	(875.23) \$	(873,909.67) \$	873,909.67	No	JE consolidated within 2011 program authorization.
141 24521	24516	41497332	T-76 L-300B MP 0.1548 to MP 0.459 T-77 L-300B MP 126.883 to MP	Snelson	08-Aug-11	30-Aug-11 \$	- ş	3,612,763.67 \$	350,020.05 \$	105,805.53 \$	3,110,619.48 \$	46,318.61 \$	(3,612,763.67) \$	3,612,763.67	No	JE consolidated within 2011 program authorization.
142 24521	23549	41474055	127.4994	Snelson	04-Jun-11	21-Jun-11 \$	- \$	3,166,299.49 \$	475,096.55 \$	111,380.66 \$	2,592,102.58 \$	(12,280.30) \$	(3,166,299.49) \$	3,166,299.49	No	JE consolidated within 2011 program authorization.
143 24521	24525	41497341	T-79A L-300B MP 149.33 to MP 160.88	Snelson	01-Oct-11	20-Oct-11 \$	- \$	2,637,019.70 \$	273,397.62 \$	24,666.82 \$	2,335,635.02 \$	3,320.24 \$	(2,637,019.70) \$	2,637,019.70	No	JE consolidated within 2011 program authorization.
144 24521	24525	41497341	T-79B L-300B MP 149.33 to MP 160.88	Snelson	01-Oct-11	20-Oct-11 \$	- See T-7	'9A See	e T-79A See	T-79A See	T-79A See	e T-79A See	T-79A Se	e T-79A	No	JE consolidated within 2011 program authorization.
145 24521	24519	41497335	T-80 L-300B MP 237.4451 to MP 249.8392	Sacleon	10 Aug 11	01 Soc 11		2,523,611.57 \$	210,108.79 \$	107,708.75 \$	2,204,355.20 \$	1,438.83 \$	(2,523,611.57) \$	2,523,611.57	No	JE consolidated within 2011 program authorization.
	2010/01/02/2010/2010/00/00/00/00/00/00/00/00/00/00/00/00/		T-81 L-300B MP 256.66 to MP	Snelson	10-Aug-11	01-Sep-11 \$										
146 24521	24518	41497334	257.5096	Snelson	03-Aug-11	01-Sep-11 \$	- \$	1,234,000.85 \$	95,169.20 \$	170.49 \$	1,123,087.15 \$	15,574.01 \$	(1,234,000.85) \$	1,234,000.85	No	JE consolidated within 2011 program authorization.
147 24521	24522	41497338	T-82 L-300B MP 263.46 to MP 264.368 T-84 L-300B MP 353.5369 to MP	Snelson	10-Aug-11	01-Sep-11 \$	- S	1,722,901.93 \$	66,233.44 \$	1,964.32 \$	1,646,470.10 \$	8,234.07 \$	(1,722,901.93) \$	1,722,901.93	No	JE consolidated within 2011 program authorization.
148 24521	24513	41497329	354.3115	Snelson	29-Jun-11	26-Jul-11 \$	- \$	3,734,229.08 \$	332,950.91 \$	10,132.97 \$	3,257,483.49 \$	133,661.71 \$	(3,734,229.08) \$	3,734,229.08	No	JE consolidated within 2011 program authorization.
149 24521	24513	41497329	T-84 L-300B MP 353.5369 to MP 354.3115	Snelson	29-Jun-11	26-Jul-11 \$	- See T-8	4B See	e T-84B See	T-84B See	T-84B See	e T-84B See	T-84B Se	e T-84B	No	JE consolidated within 2011 program authorization.
150 24521	24512	41497328	T-85 L-300B MP 384.2827 to MP 384.8438	Snelson	18-Jun-11	30-Jun-11 \$	\$	1,621,079.68 \$	119,687.74 \$	18,765.08 \$	1,409,386.70 \$	73,240.16 \$	(1,621,079.68) \$	1,621,079.68	No	JE consolidated within 2011 program authorization.
151 24521	24520	41497336	T-86 L-300B MP 414.7728 to MP 416.7896	Snelson	19-Nov-11	15-Dec-11 \$	\$	1,951,927.79 \$	125,776.89 \$	17,559.00 \$	1,624,492.58 \$	184,099.32 \$	(1,951,927.79) \$		No	JE consolidated within 2011 program authorization.
	21.62.62.64.64.64.66.66.66.66.66.66.66.66.66.66.		T-87A L-300B MP 445.7332 to MP													
152 24521	26092	41497337	451.72 T-87B L-300B MP 445.7332 to MP	Snelson	02-Sep-11	13-Oct-11 \$	- \$	4,376,184.58 \$	250,535.02 \$	97,278.81 \$	3,941,233.24 \$	87,137.51 \$	(4,376,184.58) \$	4,376,184.58	No	JE consolidated within 2011 program authorization.
153 24521	26092	41497337	451.72 T-87C L-300B MP 445.7332 to MP	Snelson	08-Sep-11	13-Oct-11 \$	- See T-8	7A See	e T-87A See	T-87A See	T-87A See	e T-87A See	T-87A Se	e T-87A	No	JE consolidated within 2011 program authorization.
154 24521	26092	41497337	451.72	Snelson	02-Sep-11	13-Oct-11 \$	- See T-8	7A See	e T-87A See	T-87A See	T-87A See	e T-87A See	T-87A Se	e T-87A	No	JE consolidated within 2011 program authorization.
155 24521	24515	41497331	T-89N L-300B MP 484.0126 to MP 492.08	Snelson	04-Aug-11	10-Sep-11 \$	- \$	4,882,290.91 \$	196,582.28 \$	67,159.44 \$	4,574,968.37 \$	43,580.82 \$	(4,882,290.91) \$	4,882,290.91	No	JE consolidated within 2011 program authorization.
156 24521	24515	41497331	T-89S L-300B MP 484.0126 to MP 492.08	Snelson	04-Aug-11	10-Sep-11 \$	- See T-8	9N See	e T-89N See	T-89N See	T-89N See	e T-89N See	T-89N Se	e T-89N	No	JE consolidated within 2011 program authorization.
157 24897	24701	41502564	T-9 L-105A-1 MP 0 to MP 0.004	ARB	26-Aug-11	21-Sep-11 \$	y construction of the location of the second state of the second s	165,896.20 \$	5,445.44 \$	- \$	147,777.16 \$	12,673.60 \$	(165,896.20) \$	165,896.20	No	Removed and added to Replacement in 2011 for efficiency reasons.
158 24521	24517	41497333	T-90 L-300B MP 492.08 to MP 502.64	Snelson	04-Aug-11	10-Sep-11 \$; - \$	6,767,301.89 \$	201,907.74 \$	244,123.49 \$	6,219,253.86 \$	102,016.80 \$	(6,767,301.89) \$	6,767,301.89	No	JE consolidated within 2011 program authorization.
159 23551	23551	41474058	T-93A L-400-3 MP 295.9127 to MP 299.91	ARB	20-Sep-11	21-Nov-11 \$	- \$	4,178,500.58 \$	298,399.05 \$	66,064.20 \$	3,607,617.21 \$	206,420.12 \$	(4,178,500.58) \$	4,178,500.58	No	JE consolidated within 2011 program authorization.
160 23551	23551	41474058	T-93B L-400-3 MP 295.9127 to MP 299.91	ARB	20-Sep-11	08-Nov-11 \$	- See T-9	3A See	e T-93A See	T-93A See	T-93A See	e T-93A See	T-93A Se	e T-93A	No	JE consolidated within 2011 program authorization.
161 24162	25348	9715461	T-96A (E) SP - 5 MP 0 to MP 2.4 Test PR-002-12, Line DFM-2405-01,	ARB	28-Apr-11	27-May-11 \$	- <u>\$</u>	2,059,122.63 \$	448,778.43 \$	66,282.02 \$	1,506,048.73 \$	38,013.45 \$	(2,059,122.63) \$	•	No	JE consolidated within 2011 program authorization.
162 N/A	26332	41644891	Fremont	GC	09-Apr-12	28-Apr-12 \$	323,557.00 \$	334,069.57 \$	175,459.36 \$	16,347.59 \$	106,746.78 \$	35,515.84 \$	(10,512.57) \$	A PARTY CONTRACTOR OF THE PROPERTY OF THE PARTY OF THE PA	No	Added Test project created to ensure pressure restoration.
163 23689 164 23505	26331 25838	41640372 41617910	Test PR-003-12, Line L-131, Milpitas TIM-013A-12, Line L-109, Daly City	GC ARB	19-Mar-12 20-Aug-12	09-Apr-12 \$ 08-Nov-12 \$	1,678,318.00 \$ 2,385,544.00 \$	1,644,989.64 \$ 302,112.57 \$	386,340.19 \$ 270,312.61 \$	100,228.51 \$ 129,207.43 \$	1,066,067.72 \$ 2,393,190.06 \$	92,353.22 \$ (2,490,597.53) \$	33,328.36 \$ 2,083,431.43 \$	1,644,989.64 302,112.57	No No	Added Test project created to ensure pressure restoration.
165 23582 166 23582	26478 26475	41650741 41650662	TIM-019-12, Line L-153, Oakland TIM-020-12, Line L-153, Oakland	ARB ARB	23-Jul-12 16-Oct-12	19-Oct-12 \$	1,613,375.00 \$ 12,140,830.00 \$	1,357,816.05 \$ 2,168,895.70 \$	208,917.27 \$ 478,304.65 \$	76,132.90 \$ 106,688.09 \$	5,224,656.59 \$ 10,376,248.25 \$	(4,151,890.71) \$ (8,792,345.29) \$	255,558.95 \$ 9,971,934.30 \$	1,357,816.05 2,168,895.70	No No	
			TIM-024-12, Line DFM-0813-01, San													
167 23861	25862	41617915	Jose TIM-037-11, Line L-132, South San	ARB	05-Sep-12	05-Nov-12 \$		553,041.18 \$	509,183.53 \$	28,418.25 \$	1,423,366.48 \$	(1,407,927.08) \$	1,196,872.82 \$	553,041.18	No	Delayed from 2011 to 2012 because the line needed to be placed back in service
168 24537	24544	41497358	Francisco TIM-042-12, Line L-057A-MD1,	Snelson	31-Jul-12	07-Sep-12 \$	3,036,076.00 \$	3,765,047.49 \$	662,495.02 \$	198,583.67 \$	2,798,565.31 \$	105,403.49 \$	(728,971.49) \$	3,724,239.12	Yes	for Winter Operations.
169 24183	25897	41482931	McDonald Island TIM-043-12, Line L-057A-MD1,	ARB	14-Jan-13	15-Feb-13 \$	1,993,254.00 \$	1,608,282.22 \$	524,635.90 \$	64,272.22 \$	988,120.11 \$	31,253.99 \$	384,971.78 \$	281,774.90	No	Delayed from 2012 to 2013 to aid in balancing the use of GC resources.
170 24183	25896	41600051	McDonald Island	ARB	14-Jan-13	15-Feb-13 \$	i 1,809,361.00 \$	832,401.49 \$	273,622.12 \$	76,342.78 \$	468,353.70 \$	14,082.89 \$	976,959.51 \$	239,549.84	No	Delayed from 2012 to 2013 to aid in balancing the use of GC resources.
			TIM-101-11, Line DFM-1816-01,													Delayed from 2011 to 2012 because the line needed to be placed back in service for Winter Operations and to allow time to acquire permitting regarding an
171 24484 172 23548	24484 25905	41497300 41622644	Watsonville TIM-102A-12, Line L-118A, Fresno	Underground Michels	25-Jul-12 03-May-12	31-Aug-12 \$ 23-May-12 \$	5,430,596.00 \$ 1,752,042.00 \$	6,120,478.99 \$ 1,074,549.65 \$	1,075,062.97 \$ 278,011.12 \$	96,855.87 \$ 6,413.74 \$	4,854,349.32 \$ 780,663.13 \$	94,210.83 \$ 9,461.66 \$	(689,882.99) \$ 677,492.35 \$	6,095,278.28 1,074,549.65	Yes No	endangered species that was found at a dig location.
			TIM-114-11, Line L-109, Mountain													
173 23365 or 2372		41534902	View	Snelson	17-Apr-12	19-Jun-12 \$		1,806,489.06 \$	376,476.28 \$	41,154.47 \$	1,216,388.29 \$	172,470.02 \$	569,392.94 \$	1,806,489.06	No	Added from a 2014 replacement project and accelerated to 2012 for Integrity
174 23692	26320	41640537	TIM-123-12, Line L-109, Hillsborough	US Pipeline	06-Sep-12	16-Nov-12 \$	3,229,470.00 \$	3,432,838.78 \$	794,701.50 \$	100,787.07 \$	2,527,115.40 \$	10,234.81 \$	(203,368.78) \$	3,432,838.78	No	Management reasons.
175 23704 176 23704	26322 26323	41640539 41640620	TIM-125-12, Line L-109, Redwood City TIM-126-12, Line L-109, Menlo Park	ARB ARB	09-Jul-12 09-Jul-12	03-Aug-12 \$ 03-Aug-12 \$	2,031,081.00 \$ 2,336,032.00 \$	1,814,004.03 \$ 2,095,374.04 \$	314,699.78 \$ 419,814.12 \$	38,538.82 \$ 56,536.49 \$	1,347,768.07 \$ 1,490,429.64 \$	112,997.36 \$ 128,593.79 \$	217,076.97 \$ 240,657.96 \$	1,814,004.03 2,095,374.04	No No	Added as new test in 2012 for Integrity Management reasons. Added as new test in 2012 for Integrity Management reasons.
			TIM-130-12, Line DFM-3017-01,													
177 23906	26324	41640621	Walnut Creek TIM-131-12, Line DFM-3017-01,	ARB	12-Jun-12	10-Aug-12 \$	1,571,040.00 \$	343,614.62 \$	724,955.28 \$	14,301.91 \$	1,253,276.11 \$	(1,648,918.68) \$	1,227,425.38 \$	343,614.62	No	Accelerated from 2013 to 2012 for Integrity management reasons.
178 23906	26325	41640622	Danville	ARB	12-Jun-12	10-Aug-12 \$	1,689,089.00 \$	1,240,436.53 \$	237,959.30 \$	9,758.85 \$	1,335,003.99 \$	(342,285.61) \$	448,652.47 \$	1,236,856.53	No	Accelerated from 2013 to 2012 for Integrity management reasons.

PSEP Filing Order	Construction			EPORTING PERIOD APRIL 1, 201					×	10% Over
Line # PSRS New PSRS Number Project Description TIM-133-12, Line DFM-7224-01, 179 N/A 26310 41641190 Modesto	Contractor Mobilization D: Underground 18-Jul-12	ite Tie-in date Job Estin	nate Amount Total Cost 1,549,166.00 \$ 1,310,594.15		aterials Cost Co 15,905.60 \$	ontracts Cost Ot 905,121.64 \$	her Cost Variai 25,894.11 \$	nce to Budget Dis 238,571.85 \$	allowed Cost 1,310,594.15	Budget Comments No Added for Integrity Management reasons.
173 N/K 20310 HIGHEST WORKSTO		TTUNG TE	1,515,100,00 \$ 1,510,554,15	2 303,072.00 2	- 00.00 ¢	<i>JUJ</i> /12109 J	£3,033.11 7	250,571.05	1,310,334,13	Added for Integrity Management reasons. Project split into A and B portions after
180 N/A 26311 41641195 TIM-134A-12, Line L-107, Sunol	Milbar 21-Sep-12	21-Sep-12 \$	176,264.00 \$ 148,118.65		2,765.82 \$	26,125.19 \$	1,667.52 \$	28,145.35 \$	148,118.65	No JE was completed for constructability reasons. JE recorded with A portion.
181 23847 26326 41640623 TIM-136-12, Line DFM-1614-01, Lodi 182 23728 26327 41640624 TIM-140-12, Line L-103, Prunedale	Underground 28-Sep-12 Underground 06-Sep-12		2,494,793.00 \$ 2,924,424.54 1,315,123.00 \$ 1,076,845.68		18,870.26 \$ 43,242.35 \$	2,371,735.45 \$ 706,401.20 \$	(184,633.32) \$ 7,175.28 \$	(429,631.54) \$ 238,277.32 \$	2,691,054.81	Yes Accelerated from 2014 to 2012 for Integrity Management and efficiency reasons. Added from a 2014 replacement project and accelerated to 2012 for Integrity No Management reasons.
				· · · · · · · · · · · · · · · · · · ·						Accelerated from 2013 to 2012 for Integrity Management reasons for remaining
183 23502 26329 41640626 TIM-142-12, Line L-103, Salinas	Underground 08-Oct-12		1,483,965.00 \$ 1,294,534.37		29,067.94 \$	930,455.32 \$	7,496.09 \$	189,430.63 \$	1,277,845.28	No Test segment. Other segments removed from PH1 due to records verified. Added new Test project from a 2013 replacement project for Integrity
184 23786 26330 41640627 TIM-143-12, Line DFM-0405-01, Napa TIM-144-12, Line DFM-0405-01, 185 23786 26337 41640628 Yountville	Michels 14-Aug-12 Michels 14-Aug-12		2,689,847.00 \$ 3,934,557.71 1,725,640.00 \$ 1,665,568.63		123,551.34 \$ 13,900.80 \$	2,564,746.58 \$ 1,218,063.45 \$	107,162.22 \$ 1,712.02 \$	(1,244,710.71) \$ 60,071.37 \$	3,934,557.71	Yes Management reasons. Added new Test project from a 2013 replacement project for Integrity No Management reasons.
TIM-146-12, Line DFM-0115-01, 186 23556 26338 41640629 Oakland	ARB 31-Oct-12		2,374,806.00 \$ 1,432,702.68		(1,213.71) \$	1,753,658.65 \$	(736,137.64) \$	942,103.32 \$	1,283,992.38	No Accelerated from 2014 to 2012 for Integrity Management reasons.
TIM-149-12, Line DFM-0813-02, San 187 23866 26340 41640631 Jose TIM-150-12, Line DFM-0814-05, San	ARB 05-Sep-12	05-Nov-12 \$	1,381,459.00 \$ 863,054.69	\$ 205,980.34 \$	5,262.77 \$	637,272.29 \$	14,539.29 \$	518,404.31 \$	863,054.69	No Accelerated from 2014 to 2012 for Integrity Management reasons.
188 23871 26341 41640632 Jose 189 N/A 26317 41641285 TIM-155-12, Line L-138D, Fresno	ARB 05-Sep-12 Michels 17-Oct-12	AND TRACK COMPANY AND A DESCRIPTION OF THE ADDRESS	1,371,159.00 \$ 723,671.22 1,793,558.00 \$ 1,161,800.28		7,013.26 \$ 11,949.63 \$	505,624.86 \$ 1,208,870.58 \$	11,078.44 \$ (446,799.28) \$	647,487.78 \$ 631,757.72 \$	723,671.22 1,161,800.28	No Accelerated from 2013 to 2012 for Integrity Management reasons. No Added for Integrity Management reasons.
190 N/A 26318 41641286 TIM-159-12, Line L-181B, Aromas TIM-160B-12, Line DFM-7222-01,	ARB 11-Jun-12		1,806,227.00 \$ 1,586,736.66		45,552.19 \$	1,042,839.05 \$	31,703.85 \$	219,490.34 \$	1,586,736.66	No Added for Integrity Management reasons.
191 23470 26831 41665948 Turlock TIM-161-12, Line DFM-7223-01, 192 23472 26343 41640634 Modesto	H&M 04-Sep-12 ARB 06-Jul-12		1,844,585.00 \$ 2,036,656.73 2,918,204.00 \$ 2,258,616.94		9,592.01 \$ 41,270.35 \$	1,592,762.91 \$ 1,735,048.00 \$	2,959.83 \$ 56,599.48 \$	(192,071.73) \$ 659,587.06 \$	2,036,656.73	Yes Accelerated from 2014 to 2012 for Integrity Management reasons. No Accelerated from 2013 to 2012 for Integrity Management reasons.
TIM-162-12, Line DFM-7224-09, 193 23474 23474 41640635 Modesto	Underground 07-Nov-12		2,134,436.00 \$ 2,261,759.51		17,071.27 \$	2,365,599.19 \$	(984,550.34) \$	(127,323.51) \$	2,034,833.32	No Accelerated from 2015 to 2012 for integrity Management reasons.
194 23918 26620 41656115 TIM-166-12, Line DFM-1301-01, Cotati	SE Pipe Line 05-Sep-12	12-Oct-12 \$	2,660,259.00 \$ 2,407,166.88	\$ 497,789.10 \$	20,361.27 \$	1,899,764.59 \$	(10,748.08) \$	253,092.12 \$	2,407,166.88	No Accelerated from 2014 to 2012 for Integrity Management reasons.
195 23697 26622 41656201 TIM-168-12, Line DFM-1614-08, Lodi 196 23520 26623 41656204 TIM-169-12, Line L-197B, Lodi	ARB 23-Jul-12 ARB 01-Aug-12	and a second	1,330,248.00 \$ 829,836.59 1,593,558.00 \$ 108,776.98	and a second	3,152.67 \$ 17,147.33 \$	570,038.64 \$ 844,520.08 \$	27,551.57 \$ (1,256,506.09) \$	500,411.41 \$ 1,484,781.02 \$	829,836.59 108,776.98	Added new Test project from a 2014 replacement project for Integrity No Management reasons. No Accelerated from 2014 to 2012 due to Integrity Management reasons.
197 23704 28135 41737020 TIM-175-12, Line L-109, Stanford	US Pipeline 13-Aug-12		1,582,113.00 \$ 331,460.91		9,325.14 \$	176,763.53 \$	(3,470.36) \$	1,250,652.09 \$	331,460.91	No Added new Test project from Replacement and Replacement project cancelled.
198 N/A 28133 41736391 TIM-177-12, Line L-119A, Sacramento	Michels 08-Oct-12	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1,120,943.00 \$ 1,042,986.73		25,327.24 \$	813,023.40 \$	(254.43) \$	77,956.27 \$ 663,045.28 \$	1,042,986.73	No Added for Integrity Management reasons.
199 N/A 28253 41746698 TIM-179-12, Line L-153_2, Oakland 200 N/A 28278 41748985 TIM-180-12, Line L-191-1, Martinez	SE Pipe Line 05-Nov-12 Underground 22-Oct-12		1,488,915.00 \$ 825,869.72 1,751,016.00 \$ 1,315,100.44		16,495.31 \$ 13,599.51 \$	716,096.69 \$ 1,016,180.87 \$	(1,047.17) \$ 27,699.51 \$	435,915.56 \$	825,869.72 1,315,100.44	No Added for Integrity Management reasons. No Added for Integrity Management reasons. Accelerated from 2012 to 2011 because Hydrotest 2011 identified this section as
W00273&W0274- HYDRO 300A MP 201 23497 25181 41535680 290.33	Snelson 25-Sep-11	11-Oct-11 \$	- \$ 2,443,979.05	\$ 96,135.40 \$	18,563.04 \$	2,120,992.99 \$	208,287.62 \$	(2,443,979.05) \$	2,443,979.05	Priority 1, needing to be tested in 2011. JE consolidated within 2011 program No authorization.
202 23582 25852 41617913 C-019-12, Line L-153, Oakland	GC 12-Mar-12	30-May-12 \$	1,662,272.00 \$ 37,584.19	\$ 1,302,767.57 \$	39,376.45 \$	656,085.18 \$ ((1,960,645.01) \$	1,624,687.81 \$	37,584.19	Added camera project necessary prior to testing to identify location of cable in the No pipe. Added camera project necessary prior to testing to identify location of cable in the
203 23582 25855 41599879 C-020-12, Line L-153, Oakland	GC 20-Mar-12	27-Nov-12 \$	1,828,221.00 \$ 491,250.65	\$ 2,492,657.31 \$	102,360.16 \$	1,108,319.95 \$ ((3,212,086.77) \$	1,336,970.35 \$	491,250.65	No pipe. Added project to Test workstream for camera inspection to aid in the removal of a
204 24554 26714 41660676 C-047C-11, Line L-153, Oakland V-002 Valve Auto - Healy Station, Ph.	GC 01-Mar-12		1,975,118.00 \$ (37,631.62		83,250.06 \$		(1,669,691.21) \$	2,012,749.62 \$	-	No cable that was in the line. Work done in both 2011/2012, 1 valve in each year, due to complications with new
205 23380 23380 30842291 1 V-003 Valve Auto - San Andreas, 2V, 206 23438 23438 30842314 Ph. 1	ARB 27-Jun-11 ARB 08-Aug-11	29-Jul-11 \$	563,665.00 \$ 402,597.89 1,162,392.00 \$ 759,715.59		114,890.33 \$ 125,022.61 \$	131,340.29 \$ 349,786.73 \$	37,820.88 \$ 70,828.36 \$	161,067.11 \$ 402,676.41 \$		No SCADA controls and new piping. Work done in both 2011/2012, 1 valve in each year, due to complications with new No SCADA controls and new piping.
207 23439 23439 30842297 V-004 Valve Auto - Larkspur Dr, Ph. 1	ARB 14-Sep-11		3,367,276.00 \$ 4,476,557.21		937,654.02 \$	2,617,495.24 \$		(1,109,281.21) \$		Yes Delayed from 2011 to 2012 due to clearance constraints
V-007 Valve Auto - Milpitas Terminal, 208 23442 23442 30842306 15V, Ph. 1	ARB 03-Oct-11	16-Mar-12 \$	3,327,400.00 \$ 2,457,139.65	\$ 612,559.02 \$	758,252.93 \$	690,087.27 \$	396,240.43 \$	870,260.35 \$	_	No Delayed from 2011 to 2012 due to clearance constraints
V-009 Valve Auto - Van Buren & 209 23594 23594 30842323 Ringwood, 1V, Ph. 1 V-011 Valve Auto - Birch & S.	US Pipeline 06-Sep-12	05-Dec-12 \$	2,115,913.00 \$ 2,241,829.00	\$ 349,816.00 \$	216,756.82 \$	1,572,426.11 \$	102,830.07 \$	(125,916.00) \$		No
210 23598 23598 30842271 Delaware, IV, Ph. 1 V-018 Valve Auto - Lawrence &	Underground 24-Jul-12	05-Dec-12 \$	2,111,927.00 \$ 1,883,686.35	\$ 387,726.58 \$	208,530.67 \$	1,204,327.21 \$	83,101.89 \$	228,240.65 \$	-	No
211 23605 23605 30842299 Lakehaven, 1V, Ph. 1 V-019 Valve Auto - Martin Station, 4V,	Michels 06-Aug-12		2,837,050.00 \$ 1,631,776.07		338,157.10 \$	848,725.01 \$	85,401.88 \$	1,205,273.93 \$		No Delayed from 2012 to 2013 due to clearance constraints and construction
212 23606 23606 30842303 Ph. 1 213 23609 23609 30842280 V-022 Valve Auto - Diana, 2V, Ph. 1 V-023 Valve Auto - Hwy 101 &	Snelson 06-Sep-12 ARB 24-Apr-12	27-Feb-13 \$ 02-Jul-12 \$	- \$ 759,640.54 1,055,898.00 \$ 1,157,226.86	NAMES & AND ADDRESS AND ADDRESS	15,557.10 \$ 174,020.99 \$	513,348.51 \$ 643,323.62 \$	48,670.29 \$ 64,012.52 \$	(759,640.54) \$ (101,328.86) \$	-	No complexities. JE in progress. Yes
214 23611 30842293 Scheller, 1V, Ph. 1 V-024 Valve Auto - Fontanoso, 3V, Ph.	ARB 18-May-12	24-Oct-12 \$	777,614.00 \$ 915,427.85		130,227.11 \$	466,073.95 \$	68,706.92 \$	(137,813.85) \$	-	Yes
215 23613 23613 30842287 1 V-025 Valve Auto - Alum Rock, 2V, Ph. 216 23614 23614 30842266 1	ARB 30-Mar-12 ARB 05-Jul-12	04-May-12 \$ 02-Aug-12 \$	837,000.00 \$ 814,027.28 997,130.00 \$ 868,570.25		152,921.41 \$ 130,219.75 \$	337,856.77 \$ 452,387.84 \$	61,396.73 \$ 40,523.08 \$	22,972.72 \$ 128,559.75 \$	-	No Accelerated from 2013 to 2012 to offset delays on other projects. No Accelerated from 2013 to 2012 to offset delays on other projects.
V-026 Valve Auto - 7A & 7B Pls, 5V, 217 23615 23615 30842261 Ph. 1	ARB 05-Jul-12 ARB 09-Apr-12	02-Aug-12 \$ 12-Jul-12 \$	871,597.00 \$ 892,853.21		130,219.75 \$ 133,744.30 \$	452,387.84 \$	40,523.08 \$	(21,256.21) \$	-	No Accelerated from 2013 to 2012 to offset delays on other projects. No Accelerated from 2013 to 2012 to offset delays on other projects.
218 23618 23618 30842305 V-027 Valve Auto - Mabury, 1V, Ph. 1	ARB 09-Apr-12	10-May-12 \$	561,416.00 \$ 646,557.17		120,647.22 \$	298,925.08 \$	33,944.93 \$	(85,141.17) \$	-	Yes Accelerated from 2013 to 2012 to offset delays on other projects.
V-028 Valve Auto - Half Moon Bay 219 23970 23970 30842289 Tap, 2V, Ph. 1	US Pipeline 02-Nov-12	13-Feb-13 \$	893,119.00 \$ 921,559.69	\$ 309,608.52 \$	159,095.29 \$	348,143.91 \$	104,711.97 \$	(28,440.69) \$	-	No Delayed from 2012 to 2013 due to clearance resource constraints.

	PSEP Filing		Order		Construction										>10% Ove	r
Line #	PSRS	New PSRS	Number	Project Description	Contractor	Mobilization Date	Tie-in date	ob Estimate Amount	Total Cost	Labor Cost N	1aterials Cost C	Contracts Cost	Other Cost Var	iance to Budget Disal	lowed Cost Budget	Comments
*****	******			V-029 Valve Auto - Anzar Tap Station												
220	23971	23971	30842269	2V, Ph. 1	ARB	22-Jun-12	30-Aug-12	\$ 743,597.00 \$	971,625.23 \$	303,573.14 \$	113,424.14 \$	505,156.95 \$	49,471.00 \$	(228,028.23) \$	- Yes	Accelerated from 2013 to 2012 to offset delays on other projects.
				V-032 Valve Auto - SP3-Line 191 Mtr												Journal Entry pending to transfer some costs from PG&E order number (3084736 to StanPac order number (97000501). After Journal Entry the approximate totals should be \$286,000 and \$957,000 for PG&E and StanPac respectively which bring
221	24284	24284	30847366	Sta, 4V, Ph 1	GT/GC	22-Jan-13	19-Mar-13	431,091.00 \$	554,861.62 \$	360,905.99 \$	62,047.11 \$	419,085.99 \$	(287,177.47) \$	(123,770.62) \$	- Yes	both costs under the JE amount.
222	24286	24286	30847363	V-036 Valve Auto - "C" Street Station, 3V. Ph. 1	H&M	05-Nov-12	18-Dec-12 5	S	4.636.71 \$	12,163.97 \$	(9,930.94) \$	(7,561.52) \$	9,965.20 \$	(4,636.71) \$	- No	Accelerated from 2013 to 2012 to offset delays on other projects. JE does not exis in PSEP because this project is StanPac funded not PSEP funded. StanPac costs incurred in the amount of \$1,296,971.
	24200	LALOO	50047505	V-037 Valve Auto - Franklin Canyon,	num	05 1107 11	10 Dec 11 ,		4,050.71 \$	12,105.57 \$	(5,550.54) \$	(7,501.52) \$	5,505.20 \$	(4,050(71) \$	110	Accelerated from 2013 to 2012 to offset delays on other projects. StanPac costs
223	24287	24287	30847364	3V, Ph 1	GT/GC	01-Nov-12	12-Dec-12	\$ 581,049.00 \$	463,573.39 \$	235,567.80 \$	60,063.78 \$	238,499.93 \$	(70,558.12) \$	117,475.61 \$	- No	incurred in the amount of \$579,871.
224	23462	23462	30842276	VALVE AUTO - CROSSMAN AVE, PH. 1	ARB	15-Jul-11	29-Sep-11 \$	\$ 2,464,000.00 \$	2,370,325.45 \$	393,384.79 \$	380,944.41 \$	1,439,273.53 \$	156,722.72 \$	93,674.55 \$	- No	
				VALVE AUTO - RENGSTORFF STN, PH.												
225	23441	23441	30842310	1	ARB	06-Jun-11	23-Sep-11	2,477,000.00 \$	3,653,524.25 \$	787,500.91 \$	643,622.87 \$	1,908,387.11 \$	314,013.36 \$	(1,176,524.25) \$	- Yes	
	000/00/00/00/00/00/00/00/00/00/00/00/00		***************************************	VALVE AUTO - SF GAS LOAD CENTER,		******	***************************************	***************************************						***************************************	***************************************	
226	23379	23379	30840648	PH. 1	ARB	03-Oct-11	11-Nov-11 \$	\$ 1,411,309.00 \$	863,175.98 \$	240,110.41 \$	237,382.17 \$	310,364.44 \$	75,318.96 \$	548,133.02 \$	- No	
				VALVE AUTO - SIERRA VISTA STN, PH.				- Andrew States			and the second second					
227	23440	23440	30842318	1	ARB	01-Aug-11	21-Oct-11 \$	\$ 1,108,504.00 \$	520,600.56 \$	122,188.39 \$	191,659.78 \$	167,717.43 \$	39,034.96 \$	587,903.44 \$	- No	

Line #	PSEP Filing PSRS	New PSRS	Project Description	Mobilization Date	Tie-in date	Job	Estimate Amount	Co
								Delayed from 2012 to 2013 due to wor
1	24009	24009	I-001 L-131 MP 50.5-57.4 UPGRADE PH-1	14-Feb-13	28-Sep-13	\$	5,786,394,00	resource allocation to other higher prio
2	24017	24017	I-003 L-300B MP 299-351.8 UPGRADE PH-1	14-Feb-13	17-Sep-13	\$	-	Job Estimate (JE) in progress.
3	24023	24023	I-005 L-300A MP 299-352 UPGRADE PH-1	28-Mar-13	17-Jun-13	\$	-	JE in progress.
4	23720	26014	R-003 DFM-7221-10 REPL 4.05mi MP 12.07-16.13 PH1	09-Oct-12	06-Jul-13	\$	16,945,787.00	Delayed from 2012 to 2013 due to con
								Delayed from 2012 to 2013 as a result
5	23825	26033	R-005 L-138 REPL 6.52mi MP 38.58-45.09 PH1	30-Jul-12	27-Apr-13	\$	33,283,697.00	more time for engineering and plannin
6	23724	25727	R-022 L-109_2A REPL 3.26mi MP 13.65-16.93 PH1	04-Sep-12	18-Apr-13	\$	31,143,398.00	
								Delayed from 2012 to 2013 as a result
7	23694	23694	R-023 L-131_1 REPL 1.39MI MP 32.38-33.77 PH1	15-Jan-13	17-Jul-13	\$	15,724,794.00	requiring long lead times.
8	23365	23366		20-Jul-12	27-Jul-13	\$	11,097,878.00	
								Delayed from 2012 to 2013 for efficien
9	24909	24909	R-043 SP4Z RETIRE 0.22mi MP 8.18-8.43 PH1	06-Mar-13	25-Apr-13	\$	259,825.00	PSEP projects in the Antioch Terminal
					nanananananana kananananana			Added as new retirement project from
10	23874	26442	R-100 L-131 RETIRE 0.57MI MP 8.56-8.93 PH1	06-Mar-13	25-Apr-13	\$	147,444.00	pipeline. Done in conjunction with R-0
								Added as new project to replacement 114_2 due to redundancy. Done in con
11	N/A	25791	R-114 L-114 RETIRE 0.82 MP 8.189-8.916 PH1	06-Mar-13	25-Apr-13	\$	264,013.00	
					•			Delayed from 2012 to 2013 due to con require an additional easement and to
12	23688	27979	R-134 L-114_2 REPL 3.60MI MP 12.70-16.52 PH1	14-Jan-13	25-Jun-13	\$	26,853,561.00	·
								Delayed from 2012 to 2013 to accomm
13	23874	25841	T-015-12, Line L-131 2, Oakley	06-Mar-13	25-Apr-13	\$	1,991,409.00	Integrity Management (IM) in 2012.
								Delayed from 2012 to 2013 to accomm
14	23554	25866	T-082-12, Line L-119B, Sacramento	28-Mar-13	27-Apr-13	\$	1,430,196.00	Integrity Management in 2012.
15	23876	27613	T-226-13, Line DFM-0817-01, San Jose	11-Mar-13	01-Apr-13	\$	1,950,753.00	
								Added as new project to be tied in to L
16	N/A	28245	T-279-13, Line SP4Z, Antioch	06-Mar-13	25-Apr-13	\$	1,448,197.00	12. Also done in conjunction with R-11
								Delayed from 2012 to 2013 due to diff
17	23600	23600	V-013 Valve Auto - Hamlin Court, 1V, Ph. 1	24-Aug-12	01-Apr-13	\$	1,580,499.00	
								Delayed from 2012 to 2013 in order to
18	23601	23601	V-014 Valve Auto - Sand Hill, 2V, Ph. 1	08-Sep-12	04-Apr-13	\$	3,513,449.00	project on the same Line, L-109.
					The Book and the second			Delayed from 2012 to 2013 due to clea
19	23604	23604	V-017 Valve Auto - Sullivan Ave, 1V, Ph. 1	18-Sep-12	12-Apr-13	\$		complexities. JE in progress.
20	23624	23624	V-035 Valve Auto - Vine Hill, 1V, Ph. 1	19-Mar-13	15-May-13	\$	-	JE in progress.
21	24288	24288	V-038 Valve Auto - San Pablo, 3V, Ph. 1	12-Mar-13	18-Apr-13	\$	-	JE in progress.
22	23647	23647	V-050 Valve Auto - Winton Avenue, 1V, Ph. 1	21-Mar-13	03-Jun-13	\$	934,216.00	
23	23649	23649	V-051 Valve Auto - Fairway Avenue, 2V, Ph. 1	27-Feb-13	16-Apr-13	\$	1,093,003.00	

Comments

vorkspace limitations at Milpitas Station and priority PSEP work.

onstruction difficulties.

ult of construction complexities requiring ning.

ult of schedule balancing and permits

iency reasons to coordinate work with other al Area.

om filed test project to reduce redundant -043, R-114, T-015-12, T-279-13.

nt workstream to retire this portion of Lconjunction with R-100, R-043, T-015-12, T-

omplicated installation methods which to coordinate with other work in the City of

nmodate other higher priority tests for

nmodate other higher priority tests for

o L-131 and tested in conjunction with T-015-114, R-043, R-100.

lifficulty in obtaining permits from the City of

to coordinate with clearance for replacement

learance constraints and construction

	PSEP Filing						
Line #	PSRS	New PSRS	Project Description	Mobilization Date	Tie-in date	Job	Estimate Amount
							Delayed from 2012 to 2013 to o
1	24025	24025	I-006 L-132 MP 31.96-38.39 UPGRADE PH-1	30-May-13	15-Jul-13	\$	2,750,137.00 rescheduled due to permitting
2	24022	24022	L-300A MP 352.3-391.2 ILI & ANALYSIS	03-Apr-13	15-Apr-13	\$	1,484,526.00
3	24015	24015	L-300B MP 351.8-390.9 ILI & ANALYSIS PH-	04-Sep-13	10-Sep-13	\$	1,309,750.00
4	24885	24885	DFM-0837-01 REPL 0.03MI MP 1.52-1.54 PH1	TBD	TBD	\$	408,192.00 Accelerated from 2014 to 2013
							Added as new replacement pro
5	23470	27001	DFM-7222-01 RIM-203 REPL 0.13MI MP 6.95-7.08 PH1	TBD	TBD	\$	689,508.00 Management reasons.
6	24905	24905	L-153-6 REPL 0.03MI MP 0.00-0.03 PH1	TBD	TBD	\$	168,647.00
7	24077	24077		12 1.1 12	77 4 17	ć	Accelerated from 2014 to 2013
7	24077	24077	R-007 L-108_1 REPL 2.24mi MP 37.14-38.17 PH1	13-Jul-13	27-Aug-13	\$	 as a result of data validation an
8	23815	23815	R-010 L-108_2 REPL 0.14mi MP 48.16-48.20 PH1	12-Feb-14	21-Apr-14	\$	-
9	23743	26006	R-011 L-118A REPL 7.24MI MP 5.62-12.55 PH1	10-Jul-13	17-Oct-13	\$	- JE in progress.
10	23790	27573	R-015 L-050A REPL 2.67mi MP 11.03-18.41 PH1	11-Jun-14	04-Aug-14	\$	-
4.1	24000	24000		15 A 1A	00 1 - 14	ć	Removed partial scope of origin
11	24900	24900	R-016 L-108_3 REPL 2.47mi MP 63.49-65.96 PH1	15-Apr-14	06-Jun-14	\$	- of data validation.
12	23704	26516	R-031 L-109_3B REPL 3.56 MI MP 18.61-22.2 PH1	23-May-14	29-Sep-14	\$	- Delayed from 2012 to 2014 duy
10	24800	24800		20 hun 14	05 414 14	ć	Delayed from 2012 to 2014 due
13	24899	24899	R-035 L-105N-5 REPL 0.10mi MP 36.39-36.47 PH1	26-Jun-14	05-Aug-14	\$	- delayed due to potential move
14	23926	29247	R-037 L-172A REPL 2.76MI MP 75.43-78.53 PH1	08-Jul-13	18-Oct-13	\$	- Added as new Replacement pro
15	23692	26023	R-046 L-109_4A REPL 3.95MI MP 24.84-30.11 PH1	23-Jun-14	15-Sep-14	\$	
16	23692	26025	R-048 L-109_4C REPL 1.25 MI MP 30.52- 31.7601 PH1	19-Aug-14	05-Sep-14	\$	- Delayed from 2012 to 2012 in a
17	2200	26842	R-051 L-210A REPL 1.30mi MP 24.14-25.41 PH1	04 10- 12	10 4	~	Delayed from 2012 to 2013 in c
17 18	23698 23704	26843 27018	R-051 L-210A KEPL 1.3011 MP 24.14-23.41 PH1 R-052 L-109_3C REPL 0.78 MI MP 23.3-24.00 PH1	04-Jun-13	19-Aug-13 17-Nov-14	\$ \$	- progress.
18	23704	26057	R-055 L-057A REPL 1.62MI MP 8.84-12.85 PH1	12-Sep-14	09-Sep-14	ې \$	-
20	23867	26037	R-055 L-057A REPL 1.02101 MIP 8.84-12.85 PH1 R-056 L-220 REPL 5.77 MI MP 18.73-34.92 PH1	21-May-14 10-Jul-13	12-Nov-13	ې \$	- JE in progress.
20	23807	26053	R-050 L-220 KEPL 5.77 MI MP 10.75-34.92 PH1 R-057 L-124A REPL 4.61mi MP 20.63-26.27 PH1	03-Jun-14	25-Aug-14	ې \$	- JE III progress.
21	24073	20035	K-037 L-124A KEFE 4.01111 WIF 20.03-20.27 FI11	03-Jun-14	23-Aug-14	.	Delayed from 2013 to 2014 due
							resulted in 10,256 feet with ver
22	23727	26010	R-058 L-021F REPL 2.16MI MP 0.00-2.15 PH1	12-Feb-14	18-Mar-14	\$	- added to a hydrotest for constr
22	23822	28468	R-059 L-123 REPL 5.90MI MP 0.00-2110 PH1	20-Jul-13	31-Oct-13	\$	- JE in progress.
23	23022	26049	R-060 L-021D REPL 2.63MI MP 19.27-24.49 PH1	14-Mar-14	24-Apr-14	\$	
25	23702	27951	R-061 L-196A REPL 2.06MI MP 11.42-13.45 PH1	14-Aug-14	24-Sep-14	\$	- JE in progress.
26	23702	23811	R-062 DFM-0603-01 REPL 0.58MI MP 0.00-0.57 PH1	03-May-13	01-Jun-13	ş Ş	- JE in progress.
20	23780	29401	R-064 DFM-0604-16 REPL 0.18 MI MP 0.00-0.18 PH1	17-Apr-13	20-May-13	\$	- JE in progress.
28	23791	23791	R-066 L-119B REPL 1.12MI MP 0.59-2.23 PH1	29-Oct-13	16-Dec-13	\$	- JE in progress.
29	23724	25719	R-067 L-109 2B REPL 0.28MI MP 2.82-10.25 PH1	06-Jul-13	05-Sep-13	\$	- JE in progress.
	25124	23715		00 101 13	05 569 15	~	Added as new replacement/tra
30	23790	25790	R-069 L-050A TRANSFER 5.03mi MP 2.55-7.60 PH1	24-Jun-13	08-Jan-14	\$	- validation. JE in progress.
31	23731	23731	R-102 L-162A REPL 1.12MI MP 6.62-7.72 PH1	13-Aug-13	02-Nov-13	\$	- JE in progress.
32	23688	26048	R-103 L-114_2 REPL 2.18MI MP 10.52-12.70 PH1	22-Jul-14	12-Nov-14	\$ \$	- Delayed from 2012 to 2014 due
33	23786	27752	R-104 DFM-0405-01 REPL 1.69MI MP 0.45-2.15	08-May-14	05-Aug-14	\$	-
34	23769	23769	R-105 DFM-1815-02 REPL 0.73MI MP 18.76-19.49 PH1	28-Aug-13	01-Nov-13	\$	- JE in progress.
	20,00				01.007.15	Υ Υ	Added as new replacement pro
35	23470	27890	R-132 DFM-7222-01 REPL 10.08 MP 0.99-11.16 PH1	09-Jul-13	17-Oct-13	\$	- increase on the line for a capac
and a second sec	concentenced with the second statistic second statistics and second statistics and second statistics are second				and a second	and a second	
35	23845	27960	R-133 L-167 REPL 4.76MI MP 29.78-34.53 PH1	12-Apr-13	08-Oct-13	\$ \$	24,333,996.00

Comments o coordinate with Crystal Springs Valve Auto project which was g delays for efficiency and cost effectiveness.

13 for Integrity Management (IM) reasons. roject in 2012 from filed 2014 test project for Integrity

13 to accommodate adjacent segments identified as high priority and added to this project. Job Estimate (JE) in progress.

ginally filed project from Phase 1 (PH1) to future phase as a result

lue to schedule and resources load balancing in 2012 then further ve of Port of Oakland Pressure Limiting Station. project as a result of data validation. JE in progress.

order to minimize revenue impacts to land owners. JE in

lue to scheduling and workload balancing. Data validation /erified records, and 111 feet added to scope. 847 feet were structability.

ransfer project from filed test project as a result of data

lue to permits requiring long lead times.

roject from filed test project due to a necessary diameter acity increase. JE in progress.

1.1	PSEP Filing	N DCDC			* 1- 1- 1-1-1		
Line #	PSRS	New PSRS	Project Description	Mobilization Date	Tie-in date	Job Estimate Amo	Added as new replacement pro
37	23728	27902	R-135 L-103 REPL 0.15MI MP 25.31-25.46 PH1	26-Jul-13	05-Sep-13	Ş	 short segments which are more
57	23720	27502		20 Jul 13	05 366 15	7	Added new project for this tran
							of L-111A and L-118A (both of t
38	23743	28091	R-140 L-118A TRANSFER 6.03MI MP 0.00-5.62 PH1	29-Jun-13	03-Aug-13	\$	- in progress.
							Added as new replacement pro
39	23470	28494	R-143 DFM-7222-01 REPL 0.61MI MP 0.00-0.61 PH1	10-Feb-14	24-Mar-14	\$	- increase on the line for a capac
							Added as new replacement pro
							the need for large amounts of L
40	23533	28472	R-144 L-021C REPL 0.90 MI MP 50.51 - 51.41 PH1	29-Jul-13	22-Aug-13	\$	- JE in progress.
41	23682	23682	R-148 DFM-1617-01 REPL 0.45 MI MP 0.00-1.26 PH1	02-Oct-13	16-Nov-13	\$	- JE in progress.
42	23780	29425	R-152 DFM-0604-16 REPL 0.32 MI MP 0.18-0.50 PH1	22-May-13	25-Jun-13	\$	- JE in progress.
43	23796	29633	R-153 L-021C REPL 0.22MI MP 34.85-35.04 PH1	11-Feb-14	18-Mar-14	\$	-
							Added as new replacement pro
							to records verified. Downgradir
44	24272	29275	R-157 DFM 1603-01 REPL 1.23MI MP 0.07-1.31	13-Aug-13	11-Sep-13	\$	- run parallel. JE in progress.
45	24052	29743	R-158 L-021D REPL 0.62MI MP 18.64-19.27 PH1	09-Jul-13	23-Aug-13	\$	- JE in progress.
46	23918	29868	R-160 DFM-1301-01 REPL 4.18MI MP 0.00-4.18 PH1	23-Oct-13	10-Jan-14	\$	- JE in progress.
							Added as new replacement pro
47	23877	29869	R-161 DFM 1815-02 REPL 6.47 MI MP 6.50-16.85 PH1	17-Mar-14	14-Apr-14	\$	- to records verified.
48	23815	30067	R-162 L-108_2 REPL 0.10MI MP 48.06-48.20	28-Feb-14	28-Mar-14	\$	-
49	24890	27904	R-202 DFM-1607-01 REPL 0.99MI MP 0.63-1.62 PH1	20-Jun-13	22-Aug-13	\$	- JE in progress.
50	23796	29631	R-205 L-021C REPL 0.54MI MP 31.85-32.39 PH1	06-Jul-13	24-Aug-13	\$	- JE in progress.
51	24055	24055	R-206 L-021H REPL 0.61MI MP 0.00-6.42 PH1	10-Feb-14	14-Mar-14	\$	-
52	23789	23789	R-207 L-177A REPL 3.27MI MP 25.46-173.89 PH1	08-Feb-14	21-Mar-14	\$	-
53	23748	23748	R-019 L-191 REPL .01mi MP 5.42-5.43 PH1	11-Oct-13	21-Nov-13	\$	- JE in progress.
E 4	22762	22762		20 Jun 12	12 1.1 12	ć	Delayed from 2012 to 2013 to a
54	23762	23762	R-038 DFM-1813-02 REPL 0.01MI MP 1.00-1.06 PH1	20-Jun-13	12-Jul-13	\$	 Integrity Management flag was Delayed from 2012 to 2013 for
55	23792	23792	R-039 L-301C REPL 0.01mi MP 17.26-17.26 PH1	17 Con 12	24-Oct-13	\$	 Regulator Station JE in progress
20	23792	23792	K-039 L-301C KEPL 0.01111 MP 17.20-17.20 PH1	27-Sep-13	24-061-15	,	Delayed from 2012 to 2014 after
							removed due to records verified
56	24254	24254	R-042 SP-3 REPL 0.01mi MP 174.29-174.29 (HWY4) PH1	25-Sep-14	05-Nov-14	\$	 constructability analysis then de
57	24894	24894	R-113 DFM-3002-01 REPL 0.02mi MP 0.00-0.00 PH1	11-Dec-14	21-Jan-15	Ş	-
58	23800	23800	R-117 L-172A-17-3 REPL 0.01MI MP 0.00-0.00 PH1	11-Dec-14	21-Jan-15	\$ \$	-
59	23742	23742	R-120 L-314A REPL 0.08MI MP 0.15-0.24 PH1	12-Dec-14	21-Jan-15	\$ \$	- JE in progress.
60	23802	23802	R-122 DFM-1306-01 REPL 0.01MI MP 1.48-4.19 PH1	25-Apr-13	28-Jun-13	\$	- JE in progress.
61	24889	24889	R-124 DFM-1306-06 REPL 0.02MI MP 0.00-0.01 PH1	25-Apr-13	28-Jun-13	\$	- JE in progress.
				F			Delayed from 2012 to 2013 for
62	24902	27712	R-131 L-119B-1 REPL 0.03MI MP 0.00-0.03 PH1	30-Apr-13	31-May-13	\$	- planned in 2013. JE in progress.
63	23824	23824	R-137 L-173 REPL 0.01MI MP 5.50-7.63 PH1	30-May-13	28-Jun-13	\$	- JE in progress.
							Delayed from 2012 to 2013 to a
64	24903	24903	R-139 L-131Y REPL 0.01MI MP 0.53-0.54 PH1	12-Apr-13	04-May-13	\$	- deactivated. JE in progress.
							Added as short replacement pro
65	23529	29053	R-145 L-306 REPL 0.01MI MP 43.30-43.31 PH1	10-Feb-14	24-Mar-14	\$	- of filed test was removed from
				an en se en			Added as a new replacement pr
66	24553	29067	R-149 L-153 REPL 0.06MI MP 3.45-3.51 PH1	01-Oct-14	11-Nov-14	\$	 result of data validation.

Comments
roject from filed test project after records verified for all but 2 are economical to replace. JE in progress.
ansfer to distribution because a new line is being installed instead
f these are transferred to distribution here) which run parallel. JE
roject from field test project due to a necessary diameter acity increase. JE in progress.
roject from filed test project for cost efficiency reason to avoid f Liquefied Natural Gas (LNG) for customer support during a test.
roject from filed test project after most of test was removed due
ling to distribution pressure and new 10" transmission line will be
roject from filed test project after most of test was cancelled due
o accommodate other higher priority projects in 2012 because as cleared as a result of data validation. JE in progress.
or efficiency reasons to coordinate with other work at Harkins Rd ss.
fter scope change that added segments after others were ied in 2012 to allow completion of engineering and
delayed further due to scheduling and workload balancing.
or efficiency reasons to coordinate work with L-119B Tests
SS.
o allow more time for engineering after a portion of the line was
project for cost efficiency reasons because all except these 50 ft. m PH1 due to records verified.
project from a filed test project and test project cancelled as a

Line #	PSEP Filing PSRS	New PSRS	Project Description	Mobilization Date	Tie-in date	Job E	stimate Amount	
67	N/A	29216	R-150 L220 & DFM-0627-01 Davis Station Rebuild	29-Jul-13	31-Aug-13	\$	-	Added new replacement project
0/	1477	23210		25 50 15	51 //ug 15	, 7		Added as short replacement project
68	23535	29718	R-156 L-021F REPL 0.01MI MP 13.90-13.92 PH1	13-Jul-13	10-Aug-13	\$		segments of filed test was remo
69	N/A	29215	R-159 L-116 MP 0.03-MP 3.86 DEACTIVATE 8-IN	02-Aug-13	06-Sep-13	\$		Added project to deactivate a p
70	23728	29124	R-230 L-103 REPL 0.01MI MP 22.20-22.21 PH1	13-Jun-14	08-Aug-14	\$	-	
71	23505	30025	T-013C-12, Line L-109, Daly City	14-Aug-13	26-Sep-13	\$		Delayed from 2012 to 2013 due
								Delayed from 2012 to 2013 to a
72	23874	25847	T-016-12, Line L-131_2, Fremont	14-Aug-13	18-Sep-13	\$	-	Management in 2012. JE in prog
								PSRS TBD due to recent project
73	N/A	TBD	T-022A-12, Line L-191-1, Lafayette	15-May-13	12-Aug-13	\$	-	customers. JE in progress.
		***************************************						Delayed from 2012 to 2013 to a
74	23511	25860	T-022B-12, Line L-191-1, Walnut Creek	03-Jun-13	12-Jul-13	\$	-	Management in 2012. JE in prog
								Delayed from 2012 to 2013 to a
75	23511	TBD	T-022C-12, Line L-191-1, Walnut Creek	03-Jun-13	05-Aug-13	\$	-	Management in 2012. JE in prog
								Delayed from 2012 to 2013 to a
76	23511	25861	T-023-12, Line L-191-1, Martinez	08-Jul-13	27-Aug-13	\$		Management in 2012. JE in prog
								Delayed from 2012 to 2013 to a
77	24188	25870	T-028-12, Line DFM-2403-12, Fremont	05-Apr-13	17-May-13	\$		Management in 2012. JE in prog
								Delayed from 2012 to 2013 to a
78	23856	25889	T-038-12, Line DFM-1615-01, Modesto	26-Apr-13	26-Jun-13	\$	(5485) 9970 (2014) 124 (2014) 126 (2014) 126 (2014) 26 (2014) 1	Management in 2012. JE in prog
								Delayed from 2012 to 2013 to a
79	23856	25891	T-039A-12, Line DFM-1615-01, Modesto	05-Jun-13	23-Jul-13	\$	and a second	Management in 2012. JE in prog
80	23510	25902	T-046-12, Line L-138, Fresno	12-Apr-13	21-May-13	\$	100701010101020000000000000000000000000	Delayed from 2012 to 2013 to r
		1000 C 222						Delayed from 2012 to 2013 to a
81	23493	25820	T-051-12, Line L-142N, Bakersfield	16-Jul-13	29-Aug-13	\$	and a community of the	Management in 2012. JE in prog
	22554	25064		42.4.42	00.0.40	<u>,</u>		Delayed from 2012 to 2013 to a
82	23554	25864	T-081-12, Line L-119B, North Highlands T-091B-12, Line L-210B, Suisun City	13-Aug-13	02-Oct-13	\$		Management in 2012. JE in prog Added due to a class location ch
83	N/A 24216	28492 25884	T-093-12, Line L-210B, Suisun City T-093-12, Line L-210C, Vallejo	08-Jul-13 01-Apr-13	15-Aug-13	\$ \$	Contraction and and and and and and and and and an	Delayed from 2012 to 2013 beca
84 85	23864	27569	T-174-12, Line DFM-1816-05, Watsonville	03-Jun-13	27-Apr-13 05-Jul-13	\$ \$	IN COLUMN DESCRIPTION OF THE OWNER OWNER OWNER OWNER OWNER	JE in progress.
86	23524	27309	T-206-13, Line L-187, King City	08-Apr-13	07-May-13	\$ \$	2,495,220.00	JE in progress.
87	23524	28395	T-207-13, Line L-187, Greenfield	08-Apr-13	23-May-13	\$ \$	2,103,598.00	
88	23524	28408	T-208A-13, Line L-187, Soledad	16-May-13	07-Jun-13	\$		JE in progress.
89	23542	TBD	T-208B-13, Line L-187, Soledad	16-May-13	24-Jun-13	\$		PSRS TBD due to recent project
90	23524	28409	T-209-13, Line L-187, Soledad	10 May 15	11-Jul-13	\$		JE in progress.
91	23524	28410	T-210-13, Line L-187, Gonzales	27-Jun-13	26-Jul-13	\$		JE in progress.
92	23542	28411	T-211A-13, Line L-187, Chualar	27-Jun-13	12-Aug-13	\$		JE in progress.
93	23542	TBD	T-211B-13, Line L-187, Chualar	27-Jun-13	29-Aug-13	\$	0/19/0/21/20/20/20/20/20/20/20/20/20/20/20/20/20/	PSRS TBD due to recent project
94	23570	27603	T-217-13, Line DFM-0215-01, Belmont	24-Apr-13	28-May-13	; \$		JE in progress.
95	23532	27604	T-218-13, Line L-021B, Napa	24-Apr-13	28-May-13	\$		JE in progress.
96	23532	27606	T-220-13, Line L-021B, Petaluma	19-Jun-13	27-Jul-13	\$		JE in progress.
97	23584	29092	T-222-13, Line DFM-0405-01, Oakville	04-Sep-13	11-Oct-13	\$		JE in progress.
98	24212	27608	T-223A-13, Line L-050A-1, Marysville	01-May-13	21-Jun-13	\$	-	JE in progress.
99	23565	27609	T-224A-13, Line DFM-0604-01, Vacaville	21-May-13	27-Jun-13	\$		JE in progress.
100	23569	27611	T-225-13, Line DFM-0604-07, Vacaville	23-Aug-13	25-Oct-13	\$	-	JE in progress.
101	23892	29093	T-227-13, Line DFM-1023-01, Redding	08-Jul-13	16-Aug-13	\$	-	JE in progress.
102	23550	27614	T-228-13, Line L-118B, Madera	11-Jun-13	24-Jul-13	\$		JE in progress.

ents
1 6 8 6. YEAR

ect post filing for Integrity Management reasons. JE in progress. project for cost efficiency reasons because all except these 2 moved from PH1 due to records verified. JE in progress. portion of L-116 with OD 8". JE in progress.

ue to permitting delays with Caltrans. JE in progress. accommodate other higher priority tests for Integrity ogress.

ct split. Delayed from 2012 to 2014 to reduce the impact on

accommodate other higher priority tests for Integrity ogress.

reduce the impact on customers.

accommodate other higher priority tests for Integrity ogress.

accommodate other higher priority tests for Integrity ogress.

change. JE in progress.

ecause large customer could not take an outage in 2012.

ct split. JE in progress.

ct split. JE in progress.

	PSEP Filing						
Line #	PSRS	New PSRS	Project Description	Mobilization Date	Tie-in date	Job Estimate Amount	
103	23550	27615	T-229A-13, Line L-118B, Madera	13-May-13	28-Jun-13	\$-	JE in progress.
104	N/A	TBD	T-229B-13, Line L-118B, Madera	13-May-13	28-Jun-13	; ; ;	JE in progress.
105	23550	27617	T-230-13, Line L-118B, Madera	25-Jul-13	05-Sep-13	\$ -	JE in progress.
106	23499	27621	T-239-13, Line L-162A, Tracy	18-Jun-13	24-Jul-13	\$ -	JE in progress.
107	23499	27622	T-240-13, Line L-162A, Tracy	28-Jun-13	09-Aug-13	\$-	JE in progress.
108	23506	27623	T-241-13, Line L-177B, Chico	30-May-13	31-Jul-13	\$ -	JE in progress.
109	23885	27645	T-265-13, Line DFM-1004-01, Orland	30-May-13	08-Jul-13	\$	Accelerated from 2014 to 2013 f
110	23872	27632	T-268-13, Line DFM-1813-02, Seaside	29-Jun-13	24-Jul-13	\$~	JE in progress.
111	23872	27649	T-269A-13, Line DFM-1813-02, Monterey	29-Jun-13	24-Jul-13	\$ -	JE in progress.
112	23872	TBD	T-269B-13, Line DFM-1813-02, Monterey	15-Jul-13	13-Aug-13	\$ -	PSRS TBD due to recent project s
113	23472	27651	T-272-13, Line DFM-7223-01, Turlock	20-Jun-13	31-Jul-13	\$-	JE in progress.
114	23748	28495	T-281B-13, Line L-191, Antioch	30-Jul-13	19-Sep-13	\$ -	JE in progress.
							Added as a new test, some segment
							replacement could not be compl
115	23926	TBD	T-282A-13, Line L-172A, West Sacramento	26-Aug-13	10-Oct-13	\$-	progress.
							Added as new test from replace
116	24906	TBD	T-282B-13, Line L-172A-1, West Sacramento	26-Aug-13	10-Oct-13	\$ -	coordinate with other test in pro
117	23560	23560	T-310-14, Line DFM-0141-01, Crockett	26-Apr-13	20-May-13	\$ -	JE in progress.
118	23567	23567	T-318-14, Line DFM-0604-06, Vacaville	TBD	TBD	\$-	
119	23911	23911	T-331A-14, Line DFM-1501-01, Yuba City	29-Apr-13	21-Jun-13	\$-	Accelerated from 2014 to 2013 t
120	23911	23911	T-331B-14, Line DFM-1501-01, Yuba City	29-Apr-13	21-Jun-13	\$-	Accelerated from 2014 to 2013 t
							Accelerated from 2014 to 2013 t
121	23913	29511	T-333-14, Line DFM-1502-02, Marysville	01-May-13	21-Jun-13	\$ -	second shut down in 2014. JE in
122	23483	23483	T-360-14, Line DFM-7226-13, Modesto	22-Apr-13	30-May-13	\$ -	Accelerated from 2014 to 2013 t
							Delayed from 2012 to 2013 to ac
123	23533	25833	TIM-065-12, Line L-021C, Penngrove	22-Jul-13	31-Aug-13	\$-	Management in 2012. JE in prog
124	23872	27648	TIM-267-13, Line DFM-1813-02, Marina	02-Aug-13	26-Aug-13	\$ -	JE in progress.
125	23478	27652	TIM-273-13, Line DFM-7226-01, Modesto	22-Apr-13	30-May-13	\$ -	JE in progress.
126	23749	27653	TIM-274-13, Line GCUST5900, Fremont	03-Jun-13	17-Jun-13	\$-	JE in progress.
							Added as new nitrogen test proj
127	24898	29426	TS-001-13, Line L-105N-3, Oakland	06-May-13	20-May-13	\$ -	because the line runs under a ra
128	23597	23597	V-010 Valve Auto - Commercial Way, 3V, Ph. 1	09-Apr-13	13-Aug-13	\$-	Delayed from 2012 to 2013 due
							Delayed from 2012 to 2013 as a
129	23599	23599	V-012 Valve Auto - Lomita Park, 1V, Ph. 1	29-Aug-13	06-Nov-13	\$ -	in San Francisco where numerou
							Delayed from 2012 to 2013 due
130	23602	23602	V-015 Valve Auto - Edgewood, 6V, Ph. 1	30-Apr-13	30-Oct-13	\$ 4,731,789.00	
131	23603	23603	V-016 Valve Auto - Crystal Springs, 4V, Ph. 1	10-Jun-13	13-Sep-13		Delayed from 2012 to 2013 due
132	24281	30014	V-030 Valve Auto - Antioch Terminal, 5V, Ph. 1	07-Jun-13	20-Sep-13	\$-	JE in progress.
							Valve Automation site selected a
133	27532	27532	V-031A Valve Auto - California, 1V, Ph. 1	29-Jul-13	14-Nov-13	\$ -	Town Meter Station for construct
						A	Valve Automation site selected a
134	24254	28282	V-031B Valve Auto Delta Fair, 1V, Ph. 1	11-May-13	04-Sep-13	\$ -	constructability and cost reasons
135	23622	23622	V-033 Valve Auto - Los Medanos, 3V, Ph. 1	09-Apr-13	10-May-13	\$	JE in progress.
136	24285	24285	V-034 Valve Auto - Concord Meter Station, 1V, Ph. 1	13-May-13	12-Jul-13	\$-	JE in progress.
							Valve Automation site selected a
4.3.7	17002	37002		A. 4.2	04 0 1 40	*	constructability and cost reasons
137	27893	27893	V-039A Valve Auto - Clayton Reg Station, 1V, Ph. 1	07-Aug-13	04-Oct-13	\$ -	and planning at this new location
138	23631	23631	V-040 Valve Auto - Walnut Ave, 1V, Ph. 1	24-Jun-13	03-Oct-13	\$	JE in progress.

3 for Integrity Management reasons. JE in progress.

ct split. JE in progress.

Comments

gments from replacement and some new to PSEP, because apleted due to site conditions limiting constructability. JE in

cement workstream with new segments added also to proximity for efficiency reasons. JE in progress.

3 to offset delays on other projects. JE in progress. 3 to offset delays on other projects. JE in progress. 3 to take with clearance for T-223A-13 in 2013 and avoid a in progress.

3 to offset delays on other projects. JE in progress. accommodate other higher priority tests for Integrity ogress.

oject from filed replacement project for cost efficiency reasons railroad. JE in progress.

e to clearance constraints. JE in progress.

a result of environmental/species issues. This valve is in a marsh ous protected species are present. JE in progress.

ue to clearance constraints and difficulty in obtaining required

e to permitting delays.

d at California Ave. (1 of 2) will be automated instead of Antioch ructability and cost reasons.

d at Delta Fair (1 of 2) instead of Antioch Town Meter Station for ons. JE in progress.

d at Clayton Regulator Station instead of Crystal Ranch for ons. Delayed from 2012 to 2013 to allow time for engineering ion. JE in progress.

	PSEP Filing						
Line #	PSRS	New PSRS	Project Description	Mobilization Date	Tie-in date	Job Estimate Amount	
139	23632	23632	V-041 Valve Auto - Foley's Ranch Crossover, 1V, Ph. 1	24-Sep-13	07-Feb-14	\$ -	JE in progress.
140	23972	23972	V-044 Valve Auto - Sheridan Rd, 2V, Ph. 1	10-Sep-13	22-Jan-14	\$ -	JE in progress.
141	23635	23635	V-045 Valve Auto - Livermore & Airway, 3V, Ph. 1	03-Jul-13	09-Sep-13	\$ -	JE in progress.
142	23636	23636	V-046 Valve Auto - Dalton Crossover, 2V, Ph. 1	09-Jul-13	14-Nov-13	\$ -	JE in progress.
143	23637	23637	V-047 Valve Auto - Livermore Junction, 1V, Ph. 1	15-Jun-13	29-Aug-13	\$-	JE in progress.
144	23638	23638	V-048 Valve Auto - Thornton Avenue, 1V, Ph. 1	17-Jul-13	07-Oct-13	\$ -	JE in progress.
145	23645	23645	V-049 Valve Auto - Alvarado, 1V, Ph. 1	09-Apr-13	24-Jun-13	\$ 1,186,817.00	
146	23651	23651	V-052 Valve Auto - 51St Avenue, 3V, Ph. 1	31-May-13	27-Sep-13	\$-	JE in progress.
147	23655	23655	V-053 Valve Auto - 4th & Jefferson, 1V, Ph. 1	28-Jun-13	20-Sep-13	\$ -	JE in progress.
148	23657	23657	V-054 Valve Auto - Brentwood Terminal, 9V, Ph. 1	12-Jun-13	15-Oct-14	\$-	JE in progress.
149	23661	23661	V-056 Valve Auto - Bixler Rd, 1V, Ph. 1	16-Jan-14	24-Apr-14	\$-	JE in progress.
150	23663	23663	V-057 Valve Auto - Palm Tract, 2V, Ph. 1	25-Apr-13	05-Jun-13	\$-	JE in progress.
151	23674	23674	V-063 Valve Auto - Valero Refinery Tap, 3V, Ph. 1	13-Apr-13	14-Jun-13	\$-	Accelerated from 2014 to 2013
152	23668	23668	V-066 Valve Auto - Cordelia, 5V, Ph. 1	04-Sep-13	05-Feb-14	\$-	
153	23667	23667	V-067 Valve Auto - Ripon-Modesto, 3V, Ph. 1	09-Jul-13	21-Sep-13	\$-	Accelerated from 2014 to 2013
154	23662	23662	V-069 Valve Auto - Airport & French Camp, 3V, Ph. 1	18-Jul-13	14-Oct-13	\$-	Accelerated from 2014 to 2013
155	23660	23660	V-070 Valve Auto - Airport & Sorona, 3V, Ph. 1	29-Jun-13	20-Sep-13	\$-	Accelerated from 2014 to 2013
156	23658	23658	V-071 Valve Auto - West Lane & Hammertown, 3V, Ph. 1	16-Sep-13	06-Nov-13	\$-	Accelerated from 2013 to 2012
157	23656	23656	V-072 Valve Auto - 8 Mile Pls, 2V, Ph. 1	13-Jul-13	27-Sep-13	\$-	Accelerated from 2014 to 2013
							Added as a new Valve Automati
							work because it will be more co
158	N/A	29461	V-083 Valve Auto - Helm Tap Station, 1V, Ph. 1	23-Apr-13	16-Jul-13	\$-	JE in progress.
							Added as a new Valve Automati
							work because it will be more co
159	N/A	29463	V-084 Valve Auto - West Ford Ave, 1V, Ph. 1	25-Jun-13	10-Sep-13	\$-	JE in progress.
							Added as a new Valve Automati
							work because it will be more co
160	N/A	29634	V-085 Valve Auto - L-300A MLV 328.06, 1V, Ph. 1	01-Oct-13	19-Dec-13	\$ -	JE in progress.
							Added as a new Valve Automati
							work because it will be more co
161	N/A	29635	V-086 Valve Auto - L-300B MLV 327.83, 1V, Ph. 1	19-Sep-13	07-Dec-13	\$	JE in progress.
							Added as a new Valve Automati
							work because it will be more co
162	N/A	29637	V-087 Valve Auto - L-138 Adams Elm Mtr RegStn, 1V, Ph. 1	02-Jul-13	19-Sep-13	\$	JE in progress.
							Added to replace filed Valve Aut
163	N/A	30094	V-088 Valve Auto - Airport & Louise, 3V, Ph. 1	26-Jul-13	22-Oct-13	\$ -	efficiency reasons due to constr
164	23665	23665	VALVE AUTO - 24TH & 20TH AVE, PH. 1	14-Nov-13	21-Dec-13	\$ -	Accelerated from 2014 to 2013
165	23646	23646	VALVE AUTO - 2AX PLS, PH. 1	14-May-14	30-Sep-14	\$ -	
166	23648	23648	VALVE AUTO - BAKERSFIELD TAP, PH. 1	14-May-14	30-Sep-14	\$ -	
167	23973	23973	VALVE AUTO - CUMMINGS CREEK, PH. 1	14-May-14	30-Sep-14	\$ -	
168	23672	23672	VALVE AUTO - EAST FAIRFIELD CROSSOVER, PH. 1	14-Feb-14	31-Mar-14	\$-	
169	23670	23670	VALVE AUTO - FAIRFIELD CROSSOVER, PH. 1	14-Feb-14	31-Mar-14	\$-	
170	23650	23650	VALVE AUTO - GOSFORD RD MTR STA, PH. 1	14-May-14	30-Sep-14	\$ -	
171	23634	23634	VALVE AUTO - IRVINGTON, PH. 1	14-May-14	30-Sep-13	\$ -	JE in progress.
172	23659	23659	VALVE AUTO - LAKES VALVE LOT, PH. 1	14-Nov-13	31-Dec-13	\$ -	JE in progress.
173	23654	23654	VALVE AUTO - LAS VINAS STA, PH. 1	14-Feb-14	30-Jun-14	\$-	

Comments 3 to offset delays on other projects. JE in progress. 3 to offset delays on other projects. JE in progress. 3 to offset delays on other projects. JE in progress. 3 to offset delays on other projects. JE in progress. 2 to offset delays on other projects. JE in progress. 3 to offset delays on other projects. JE in progress. ation project from what was originally part of the scope of ILI cost effective and allow for standardization of Valve Automation. ation project from what was originally part of the scope of ILI cost effective and allow for standardization of Valve Automation. ation project from what was originally part of the scope of ILI cost effective and allow for standardization of Valve Automation. ation project from what was originally part of the scope of ILI cost effective and allow for standardization of Valve Automation. ation project from what was originally part of the scope of ILI cost effective and allow for standardization of Valve Automation. uto project Airport & Yosemite (PSRS 23664) for cost and truction complexities at the filed project site. JE in progress. 3 to offset delays on other projects. JE in progress.

	PSEP Filing						
Line #	PSRS	New PSRS	Project Description	Mobilization Date	Tie-in date	Job Estimate Amount	
							Valve Automation site selected
							constructability and cost efficien
174	23633	23633	VALVE AUTO - MISSION BLVD	14-Feb-14	30-Jun-14	\$ -	engineering and planning at this
175	23644	23644	VALVE AUTO - MOJAVE RIVER CROSSING, PH. 1	14-May-14	30-Sep-14	\$ -	
176	23673	23673	VALVE AUTO - N SAC UGND HLDR, PH. 1	14-Nov-13	31-Mar-14	\$ -	
177	23679	23679	VALVE AUTO - PARAMOUNT COURT, PH. 1	14-Feb-14	31-Mar-14	\$-	
							Delayed from 2012 to future ph
							because when pipeline going th
178	23608	23608	VALVE AUTO - ROUSSEAU, PH. 1	14-May-14	30-Sep-14	\$-	through this location.
179	23675	23675	VALVE AUTO - SAC GAS LOAD CENTER, PH. 1	14-Nov-13	31-Mar-14	\$ -	
180	23974	23974	VALVE AUTO - TOMPKINS HILL, PH. 1	14-May-14	30-Sep-14	\$ -	
181	23652	23652	VALVE AUTO - UNION AVE METER REG STA, PH. 1	14-May-14	30-Sep-14	\$ -	
182	23669	23669	VALVE AUTO - YOLO CAUSWAY BLVD. TIE, PH. 1	14-Nov-13	31-Mar-14	\$-	

Comments ed at Mission Blvd. instead of Vargas Crossover for ciency reasons. Delayed from 2013 to 2014 to allow time for this new location. JE in progress. phase when a new location for automation will be determined g through Rousseau is replaced in 2015 it will no longer be routed

Line #	New PSRS	Project Description	Region	Risk	Description	Cost Imp	act (\$)	Cost	Impact (\$/mi)	Schedule Impact	Schedule Impact	>10 Variai
1	24544	TIM-037-11;L-132_1 TEST 2.98MI MP 43.61- 46.59 PH1	Bay	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, which may result in contractor moving to another construction location on-site or other methods of mitigation.	N//	Ą		N/A	(days) 9	(days/mi) 3.0	Yes
2	24544	TIM-037-11;L-132_1 TEST 2.98MI MP 43.61- 46.59 PH1	Вау	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$ 20	.000.00	\$	6,711.41	N/A	N/A	Ye
3	24544	TIM-037-11;L-132_1 TEST 2.98MI MP 43.61- 46.59 PH1	Вау	Changes After Issue For Bid (IFB)	Any changes to the project that were excluded from or occurred after IFB.	\$ 85	.000.00	\$	28,523.49	N/A	N/A	Ye
4	24544	TIM-037-11;L-132_1 TEST 2.98MI MP 43.61- 46.59 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 80	.000.00	\$	26,845.64	N/A	N/A	Yes
5	24544	TIM-037-11;L-132_1 TEST 2.98MI MP 43.61- 46.59 PH1	Bay	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 60	.000.00	\$	20,134.23	N/A	N/A	Yes
6	26330 / 26337	TIM-143/144-12;DFM-0405-01 TEST 9.81MI MP 3.87-13.00 PH1	Вау	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$ 85	.000.00	\$	9,259.26	3	0.3	Yes
7	26330 / 26337	TIM-143/144-12;DFM-0405-01 TEST 9.81MI MP 3.87-13.00 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 90	000.00	\$	9,803.92	N/A	N/A	Yes
8	26330 / 26337	TIM-143/144-12;DFM-0405-01 TEST 9.81MI MP 3.87-13.00 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 130,	000.00	\$	14,161.22	N/A	N/A	Yes
9	26330 / 26337	TIM-143/144-12;DFM-0405-01 TEST 9.81MI MP 3.87-13.00 PH1	Bay	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$ 60	.000.00	\$	6,535.95	N/A	N/A	Yes
10	26330 / 26337	TIM-143/144-12;DFM-0405-01 TEST 9.81MI MP 3.87-13.00 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 115,	000.00	\$	12,527.23	N/A	N/A	Yes
11	26330/26337	TIM-143/144-12;DFM-0405-01 TEST 9.81MI MP 3.87-13.00 PH1	Вау	Contaminated Test Water (other than Hg)	Any variety of contaminants could be found in the water and require additional costs to sample, clean, etc.	\$ 300,	000.00	\$	32,679.74	N/A	N/A	Yes
12	26324 / 26325	TIM-130/131-12;DFM-3017-01 TEST 7.11MI MP 0.82-7.54 PH1	Вау	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 600,	000.00	\$	84,388.19	N/A	N/A	No
13	26324 / 26325	TIM-130/131-12;DFM-3017-01 TEST 7.11MI MP 0.82-7.54 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 120,	000.00	\$	16,877.64	N/A	N/A	No
14	26324 / 26325	TIM-130/131-12;DFM-3017-01 TEST 7.11MI MP 0.82-7.54 PH1	Вау	Surveying and Potholing	Delays or cost increases resulting from surveying, potholing, or mark and locate not being completed prior to Issued for Construction (IFC).	\$ 60	.000.00	\$	8,438.82	N/A	N/A	No
15	26324 / 26325	TIM-130/131-12;DFM-3017-01 TEST 7.11MI MP 0.82-7.54 PH1	Вау	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$ 60	.000.00	\$	8,438.82	N/A	N/A	No
16	26324 / 26325	TIM-130/131-12;DFM-3017-01 TEST 7.11MI MP 0.82-7.54 PH1	Вау	Pigging	Potential issues may occur while pigging the line that cause delays or cost increases to resolve them.	\$ 90	.000.00	\$	12,658.23	7	1.0	No
17	25849	T-073-12;L-021F TEST 0.711MI MP 19.17- 20.09 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 60	.000.00	\$	84,388.19	N/A	N/A	No

>10% 'ariance	Comments
Yes	The schedule was delayed due to construction resources and the unanticipated need to truck water around San Bruno mountain after attempts to pump water over San Bruno Mountain proved unsuccessful due to pigging issues.
Yes	Additional unplanned support was required when sufficient resources were not available at the required time.
Yes	Variance in pipe depth identified - 20ft. rather than 3ft.
Yes	Attempted coordination of work at station, at the request of Daly City, proved unsuccessful. Temporary piping installed to support station tie-in had to be removed prior to work moving ahead separately.
Yes	The Parks department requested that the access road to San Bruno Mountain where this work was located be re-graded and the road rocked. This will also be helpful when other PG&E work is done in this area in the future.
Yes	Delayed permit (City of Napa) resulted in unplanned standby time for the construction resources.
Yes	Use of portable Liquefied Natural Gas (LNG) and reduction in pipeline outage to minimize customer impact required increased labor (night and weekend overtime) compared to planned (construction resources plan was based upon five 10 hour shifts).
Yes	Extra excavations were required after field inspection by General Construction (GC) and Transmission and Restoration (T&R) resources recommended different connection locations for portable Compressed Natural Gas (CNG) support.
Yes	Additional equipment support required as sufficient resources were not available at the time needed.
Yes	Additional paving was completed, in conjunction with other PG&E work nearby, at the request of the City of Napa despite it not being required by the permit.
Yes	Additional trucking and water handling/disposal costs, e.g. additional baker tank storage and land costs, after identification of Boron in the source water.
No	Construction resources could not locate fittings in the expected location and therefore had to extend existing and undertake additional excavations.
No	Construction resources were required to conduct additional pre- testing of pipe to replace additional fittings not included in the IFB.
No	Mark and locate had to be completed at the start of construction.
No	Unplanned support was provided because sufficient resources were not available at the time needed.
No	Delays due to pigging issues (sticking).
No	Additional work was identified after the IFB which involved removing a section of abandoned line.

and the second									Schedule	Schedule	>10%			
Line #	New PSRS	Project Description	Region	Risk	Description	Cost Impact (\$)	Cost	mpact (\$/mi)	Impact	Impact	Variance	Comments		
40	25040		5					4 05 4 05 2 02	(days)	(days/mi)	1			
18	25849	T-073-12;L-021F TEST 0.711MI MP 19.17- 20.09 PH1	Bay	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG	\$ 750,000.00	\$	1,054,852.32	N/A	N/A	No	Unplanned support was provided because sufficient resources were not available at the time needed.		
					because they did not have sufficient resources									
					available at the time that they were needed.									
19	25849	T-073-12;L-021F TEST 0.711MI MP 19.17-	Bay	Changes After IFB	Any changes to the project that were excluded from	\$ 80,000.00	\$	112,517.58	N/A	N/A	No	Work Required by others: The owner of the parking lot where the		
		20.09 PH1			or occurred after IFB.							work was being done claimed that construction resources		
														damaged it so the entire lot was repaved.
20	25857	T-021-12;L-191-1 TEST 0.362MI MP 9.59-9.94	Bay	Unknown Obstructions	Potential interference with unmarked and unknown	N/A		N/A	N/A	N/A	No	This work was within a station so other lines were encountered,		
		PH1		During Excavation	obstructions found during the construction							but there was fortunately no schedule or cost impact due to timely		
					excavation or incorrect drawings potentially delaying							mitigation undertaken.		
					construction and resulting in additional cost.									
21	25857	T-021-12;L-191-1 TEST 0.362MI MP 9.59-9.94	Bay	Changes After IFB	Any changes to the project that were excluded from	\$ 30,000.00	\$	82,872.93	N/A	N/A	No	Unplanned support was provided because sufficient resources		
		PH1			or occurred after IFB.							were not available at the time needed.		
22	25857	T-021-12;L-191-1 TEST 0.362MI MP 9.59-9.94	Bay	Changes After IFB	Any changes to the project that were excluded from	\$ 75,000.00	\$	207,182.32	N/A	N/A	No	Additional construction work included removing a main line valve		
		PH1			or occurred after IFB.							and replacing some others was identified after the contract was		
												issued.		
23	24530 / 25850 /	T-038-11/T-018-12/T-039B-11;L-132 TEST	Bay	Changes After IFB	Any changes to the project that were excluded from	\$ 65,000.00	\$	12,331.63	N/A	N/A	Yes	During construction it was discovered that the pipe was shallower		
	24531 5.271MI MP 46.61-51.5	5.271MI MP 46.61-51.50 PH1			or occurred after IFB.							than expected so the line had to be lowered to install the valve.		
24		T-038-11/T-018-12/T-039B-11;L-132 TEST	Bay	Changes After IFB	Any changes to the project that were excluded from	\$ 70,000.00	\$	13,280.21	N/A	N/A	Yes	Additional work was added after the contract was issued.		
	24531	5.271MI MP 46.61-51.50 PH1			or occurred after IFB.									
25	24530/25850/	T-038-11/T-018-12/T-039B-11;L-132 TEST	Bay	Support for Other Work	Unplanned support (equipment or labor) was	\$ 190,000.00	\$	36,046.29	N/A	N/A	Yes	During construction conditions found required the other end of an		
	24531	5.271MI MP 46.61-51.50 PH1		Teams	provided to other teams such as GC, CNG, or LNG							abandoned 'Tap' to be dug up which was not originally planned in		
					because they did not have sufficient resources							the IFB.		
	<u> </u>				available at the time that they were needed.				<u> </u>					
26		T-038-11/T-018-12/T-039B-11;L-132 TEST	Bay	Changes After IFB	Any changes to the project that were excluded from	\$ 150,000.00	Ş	28,457.60	N/A	N/A	Yes	After the IFB was issued, it was identified that an additional test		
	24531	5.271MI MP 46.61-51.50 PH1			or occurred after IFB.							needed to be completed and valves needed to be removed in a		
						* == == ==						station to successfully complete this project.		
27		T-038-11/T-018-12/T-039B-11;L-132 TEST	Bay	Clearance	Tight clearance windows may result in contractor	\$ 50,000.00	Ş	9,485.87	N/A	N/A	Yes	Construction resources had to work longer hours than initially		
	24531	5.271MI MP 46.61-51.50 PH1			working additional hours to meet the window for tie-							planned, i.e. overtime, due to the short clearance window for the		
28	25863 / 25865 /	T-025-12 /T-026-12/T-027-12;L-100 TEST	Ctr Cst	Mercury Cleaning -	In. Cleaning Hg from piping associated prior to strength	\$ 1,800,000.00	ć	151,566.18	N/A	N/A	Yes	tie-in. High Levels of mercury required 40 pig runs resulting in		
20	25868	11.88MI MP 138.43-150.13 PH1			testing. This includes the requirement to meet	\$ 1,800,000.00	Ŷ	151,500.18	NA		163	significantly higher crew time than planned.		
	20000	11.00MI MP 130.43-130.13 PH1		Strength Test	drinking water standards of rinse water prior to							significantly higher crew time than planned.		
					hydrostatically testing.									
29	25863 / 25865 /	T-025-12 /T-026-12/T-027-12;L-100 TEST	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from	\$ 220,000,00	ć	18,524.76	N/A	N/A	Yes	During construction it was identified that 11 additional sniff holes		
25	25868	11.88MI MP 138.43-150.13 PH1	eu est	chunges / ner h b	or occurred after IFB.	\$ 220,000.00	ľ	10,524.70	14,73		105	were needed to safely perform the cut/cap/tie-in work.		
	23808	11.00001001 150.45-150.151111			or occurred after if b.							were needed to safely perform the cuty capy tie-in work.		
30	25863 / 25865 /	T-025-12 /T-026-12/T-027-12;L-100 TEST	Ctr Cst	Unstable/Weak Soil	Unstable soils may require additional shoring which	\$ 4,000.00	Ś	336.81	N/A	N/A	Yes	Constructing resources had to do extra soil stability work around a		
	25868	11.88MI MP 138.43-150.13 PH1		,	may cause delays to obtain and install.	· ,	l ·			,		valve set because of unstable soil.		
31	25863 / 25865 /	T-025-12 /T-026-12/T-027-12;L-100 TEST	Ctr Cst	Unexpected Condition of	Pipe, valves or fittings may be leaking or faulty	\$ 100,000.00	\$	8,420.34	N/A	N/A	Yes	Valves on this line were leaking so additional materials, trucking,		
	25868	11.88MI MP 138.43-150.13 PH1		Pipe, Valves or Fittings	requiring additional work to repair or replace them,	. ,		,				welding, inspection, digging, T&R support, Storm Water Pollution		
					not including linear indications on the pipe.						Prevention (SWPP) plan and division support were all required to			
												replace the valves.		
32	25890	T-096-12;DFM-1816-01_2 TEST 1.96MI MP	Ctr Cst	Unknown Obstructions	Potential interference with unmarked and unknown	\$ 260,000.00	\$	132,653.06	N/A	N/A	Yes	Delays in determining CNG injection point: endangered species		
		16.30-18.25 PH1			obstructions found during the construction							identification at an alternate site forced a return to the originally		
					excavation or incorrect drawings potentially delaying							planned location in spite of the known impact of permitting delays		
					construction and resulting in additional cost.							associated with that location.		
33	25890	T-096-12;DFM-1816-01_2 TEST 1.96MI MP	Ctr Cst	Field Conditions Differ	As-built drawings and/or GIS were believed to be	\$ 1,000,000.00	\$	510,204.08	N/A	N/A	Yes	Additional excavations, restoration, and multiple tests required.		
		16.30-18.25 PH1		From Expected Conditions	accurate according to records, but did not match									
					what was actually encountered in the field.		<u> </u>							
34	24484	TIM-101-11;DFM-1816-01_1 TEST 5.90MI MP	Ctr Cst	Pigging	Potential issues may occur while pigging the line that	\$ 30,000.00	\$	5,082.16	2	0.3	Yes	A pig became stuck at an unidentified drip requiring an excavation		
		3.44-8.44 PH1			cause delays or cost increases to resolve them.							in a creek to remove the drip and the pig.		
		1		1						1	1			

Line #	New PSRS	Project Description	Region	Risk	Description	Co	st Impact (\$)	Cost In	npact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>1 Vari
35	24484	TIM-101-11;DFM-1816-01_1 TEST 5.90MI MP 3.44-8.44 PH1	Ctr Cst		Delays or cost increases resulting from surveying, potholing, or mark and locate not being completed prior to IFC.	\$	75,000.00	\$	12,705.40	3	0.5	Y
36	26831	TIM-160B-12;DFM-7222-01 TEST 1.948MI MP 11.33-13.15 PH1	Ctr Vly	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	150,000.00	\$	77,041.60	N/A	N/A	Y
37	26831	TIM-160B-12;DFM-7222-01 TEST 1.948MI MP 11.33-13.15 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	60,000.00	\$	30,816.64	N/A	N/A	Y
38	27568	T-173-12;DFM-7219-01 TEST 3.73MI MP 0.00- 3.73 PH1	Ctr Vly	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	100,000.00	\$	26,845.64	N/A	N/A	1
39	27568	T-173-12;DFM-7219-01 TEST 3.73MI MP 0.00- 3.73 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	70,000.00	\$	18,791.95	N/A	N/A	N
40	25893	T-040-12;DFM-7221-10 TEST 2.46MI MP 7.21- 9.65 PH1	Ctr Vly		Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$	15,000.00	\$	6,097.56	N/A	N/A	P
41	25893	T-040-12;DFM-7221-10 TEST 2.46MI MP 7.21- 9.65 PH1	Ctr Vly	Mercury Cleaning - Strength Test	Cleaning Hg from piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$	25,000.00	\$	10,162.60	N/A	N/A	Ν
42	25893	T-040-12;DFM-7221-10 TEST 2.46MI MP 7.21- 9.65 PH1	Ctr Vly	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	30,000.00	\$	12,195.12	N/A	N/A	Ν
43	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly		Any variety of contaminants could be found in the water and require additional costs to sample, clean, etc.	\$	20,000.00	\$	10,351.97	N/A	N/A	1
44	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	8,000.00	\$	4,140.79	N/A	N/A	M
45	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly	From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	36,000.00	\$	18,633.54	N/A	N/A	Ν
46	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly	Surveying and Potholing	Delays or cost increases resulting from surveying, potholing, or mark and locate not being completed prior to IFC.	\$	96,000.00	\$	49,689.44	N/A	N/A	N
47	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly		Delays or cost increases resulting from surveying, potholing, or mark and locate not being completed prior to IFC.	\$	30,000.00	\$	15,527.95	N/A	N/A	л
48	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly	-	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	50,000.00	\$	25,879.92	N/A	N/A	Ν
49	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	150,000.00	\$	51,159.62	N/A	N/A	Ν
50	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly	Unexpected Condition of Pipe, Valves or Fittings	Pipe, valves or fittings may be leaking or faulty requiring additional work to repair or replace them, not including linear indications on the pipe.	\$	26,000.00	\$	6,612.41	N/A	N/A	7
51	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly	From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	46,000.00	\$	9,326.85	N/A	N/A	1
52	25900	T-100-12;L-148 TEST 1.93MI MP 12.58-14.62 PH1	Ctr Vly	Pigging	Potential issues may occur while pigging the line that cause delays or cost increases to resolve them.	\$	27,000.00	\$	4,551.58	N/A	N/A	1

>10% ′ariance	Comments
Yes	Additional excavation, T&R and GC resources required to locate additional TAPs in the field.
Yes	Additional excavation and restoration was required.
Yes	To maintain customer service and pressure (high customer loads) a bridle and bypass line were installed to support CNG injection at a 'tap' location.
No	During construction, it was identified that 5 additional sniff holes were needed to safely perform the cut/cap/tie-in work.
No	During construction, an unpiggable makeshift "T" was found and had to be removed and replaced with a new piggable piece.
No	Nesting birds reside in the area so additional environmental monitors were needed.
No	Additional construction costs were incurred to clean/remove mercury identified in the pipeline.
No	Unplanned support was provided because sufficient resources were not available at the time needed.
No	Additional filtration was required to clean contaminated water at the site.
No	During construction it was identified that an additional sniff hole was needed to safely perform the cut/cap/tie-in work.
No	After construction had started the pipe at the location for a new valve was discovered to be only 1 ft. deep (4 ft. minimum is required) so the whole assembly was lowered to accommodate the valve.
No	During construction, a bad weld was discovered on a pipeline section not being replaced. A section of pipe and the weld were cut out and replaced with new pipe.
No	After the pipe was filled with water, two bad welds were encountered so the pipe was dewatered to repair them before the pipe was refilled to test.
No	Additional backfill and restoration costs incurred due to street location of one pipe section. In addition a bell hole required significant extension (planned 8 x 20 ft. extended to 8 x ~150 ft.) to complete the work.
No	During construction a bell hole ended up being much larger than expected which resulted in additional costs, including 24 hr. flaggers, traffic control, avoidance of an unmarked water line, and additional welding.
No	A valve leak identified resulted in an additional excavation to address the issue.
No	Construction conditions required a valve assembly to be re- oriented which caused a new vault to be ordered to fit the new arrangement.
No	The clearing Pigs found debris in the line causing additional pipe to be removed and welded, resulting in a cost increase.

Line #	New PSRS	Project Description	Region	Risk	Description	Co	st Impact (\$)	Cos	t Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10 Varia
53	25898	T-099-12;L-148 TEST 6.59MI MP 6.06-12.58 PH1	Ctr Vly	Contaminated Test Water (other than Hg)	Any variety of contaminants could be found in the water and require additional costs to sample, clean, etc.	\$	16,000.00	\$	2,428.29	N/A	N/A	No
54	25898	T-099-12;L-148 TEST 6.59MI MP 6.06-12.58 PH1	Ctr Vly	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	50,000.00	\$	7,588.40	2	0.3	No
55	25898	T-099-12;L-148 TEST 6.59MI MP 6.06-12.58 PH1	Ctr Vly	Pigging	Potential issues may occur while pigging the line that cause delays or cost increases to resolve them.	\$	10,000.00	\$	1,517.68	N/A	N/A	No
56	28135	TIM-175-12;L-109_3 TEST 0.08MI MP 16.93- 17.01 PH1	Ctr Cst	Unexpected Condition of Pipe, Valves or Fittings	Pipe, valves or fittings may be leaking or faulty requiring additional work to repair or replace them, not including linear indications on the pipe.	\$	100,000.00	\$	1,250,000.00	N/A	N/A	No
57	28135	TIM-175-12;L-109_3 TEST 0.08MI MP 16.93- 17.01 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	13,000.00	\$	162,500.00	N/A	N/A	No
58	28135	TIM-175-12;L-109_3 TEST 0.08MI MP 16.93- 17.01 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	104,000.00	\$	1,300,000.00	N/A	N/A	No
59	25892	T-097-12;L-148 TEST 6.06MI MP 0.00-6.06 PH1	Ctr Vly	Weather Impacts	Potential construction delays and resulting additional costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.	\$	6,000.00	\$	990.92	N/A	N/A	No
60	25892	T-097-12;L-148 TEST 6.06MI MP 0.00-6.06 PH1	Ctr Vly	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$	20,000.00	\$	3,303.06	N/A	N/A	No
61	25892	T-097-12;L-148 TEST 6.06MI MP 0.00-6.06 PH1	Ctr Vly	Mercury Cleaning - Strength Test	Cleaning Hg from piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$	110,000.00	\$	18,166.80	N/A	N/A	No
62	25892	T-097-12;L-148 TEST 6.06MI MP 0.00-6.06 PH1	Ctr Vly	Surveying and Potholing	Delays or cost increases resulting from surveying, potholing, or mark and locate not being completed prior to IFC.	\$	30,000.00	\$	4,954.58	N/A	N/A	No
63	25908	T-102D-12;L-118A TEST 0.27MI MP 37.38- 37.71 PH1	Ctr Vly	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$	25,000.00	\$	93,984.96	N/A	N/A	No
64	25908	T-102D-12;L-118A TEST 0.27MI MP 37.38- 37.71 PH1	Ctr Vly	Linear Indications	Linear indications may be encountered when excavation and require repair or replacement.	\$	20,000.00	\$	75,187.97	N/A	N/A	No
65	23474	TIM-162-12;DFM-7224-09 TEST 1.35MI MP 0.00-1.35 PH1	Ctr Vly	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	47,000.00	\$	34,918.28	15	11.1	No
66	23474	TIM-162-12;DFM-7224-09 TEST 1.35MI MP 0.00-1.35 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	550,000.00	\$	408,618.13	N/A	N/A	No
67	23474	TIM-162-12;DFM-7224-09 TEST 1.35MI MP 0.00-1.35 PH1	Ctr Vly	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be s accurate according to records, but did not match what was actually encountered in the field.	\$	15,000.00	\$	11,144.13	N/A	N/A	No
68	23474	TIM-162-12;DFM-7224-09 TEST 1.35MI MP 0.00-1.35 PH1	Ctr Vly	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	11,000.00	\$	8,172.36	N/A	N/A	No

10% iance	Comments
No	Additional filtration was required to clean contaminated water at the site.
No	Delays encountered for GC and T&R to connect CNG to 13 TAPs caused increased standby time and overtime to complete the clearance.
No	During construction, Pigs became stuck which resulted in additional costs for inspectors, etc.
No	During construction two valves were discovered to be leaking and were replaced.
No	Additional costs incurred to conduct a nitrogen test on a pipeline crossing a creek to meet Integrity Management inspection compliance deadline - permits associated with addressing the pipeline also identified as 24-inch diameter not 22-inch diameter not being unavailable within that timeline. Replacement of the pipeline was rescheduled to 2013 to use a bore.
No	TAP isolations and an extra sniff hole were required to extend project length and accommodate two pipe sizes. There were additional costs for test heads and extra labor hours.
No	There was heavy rain so the ground had to be graveled to support CNG trailers.
No	Nesting owls were present so excavations were hand dug, the work site was kept very quiet and extra inspectors were present.
No	Additional costs to clean mercury from the pipeline before testing.
No	Additional pothole inspection of the pipeline was conducted through an agricultural field to assure that there were no unidentified strikes on the line before testing.
No	Fairy Shrimp were present (mitigation required) as well as nesting birds so additional environmental inspectors were present.
No	Extra cuts, an excavation, and additional engineering were required.
No	There was a delay acquiring the Caltrans encroachment permit and a requirement to have California Highway Patrol (CHP) present because of night work which took time to contract and incurred additional costs.
No	Load information for a new customer was not available, so it was not known until after the IFB that the test would need to be split to support the customer.
No	An additional excavation was required.
No	Unplanned support was provided because sufficient resources were not available at the time needed.

Line #	New PSRS	Project Description	Region	Risk	Description	Cost	Impact (\$)	Cost Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10% Variance	Comments
69	28448	T-183-12;L-300B_1 TEST 0.25MI MP 152.45- 152.69 PH1	Ctr Vly	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$	25,000.00 \$	100,000.00		N/A	No	A tortoise exclusion fence was necessary.
70	28448	T-183-12;L-300B_1 TEST 0.25MI MP 152.45- 152.69 PH1	Ctr Vly	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	24,500.00 \$	98,000.00	2	6.0	No	Additional trench plating and re-grading were needed to protect the pipeline during construction.
71	28448	T-183-12;L-300B_1 TEST 0.25MI MP 152.45- 152.69 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	\$	98,000.00 \$	392,000.00	1	4.0	No	The wrong pipe was delivered and the inspection crew did not catch the mistake until after welding. The pipe was cut out and replaced with the correct pipe.
72	28448	T-183-12;L-300B_1 TEST 0.25MI MP 152.45- 152.69 PH1	Ctr Vly	Linear Indications	Linear indications may be encountered when excavation and require repair or replacement.	\$	48,000.00 \$	192,000.00	2	6.0	No	A linear indication was found while conducting the H-Form inspection. The pipe was cut out and replaced.
73	28448	T-183-12;L-300B_1 TEST 0.25MI MP 152.45- 152.69 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	\$	12,800.00 \$	51,200.00	1	2.0	No	There were delays waiting on the PG&E T&R crews to commission a valve while they dealt with other emergencies.
74	28448	T-183-12;L-300B_1 TEST 0.25MI MP 152.45- 152.69 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	\$	20,000.00 \$	80,000.00	N/A	N/A	No	There was a delay in testing, extra costs to haul water and find a discharge source.
75	25913	T-102F-12;L-118A TEST 0.53MI MP 58.21- 58.74 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	45,800.00 \$	87,238.10	1	1.9	No	An additional sniff hole was required to accommodate the installation of a Pressure Control Fitting.
76	26310	TIM-133-12;DFM-7224-01 TEST 0.68MI MP 5.34-6.02 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	\$	4,400.00 \$	6,480.12	1	0.7	No	Costs incurred due to additional time spent on stand-by because the local PG&E T&R crew was not available to complete their assigned work.
77	26310	TIM-133-12;DFM-7224-01 TEST 0.68MI MP 5.34-6.02 PH1	Ctr Vly		Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	5,300.00 \$	7,805.60	7	10.3	No	Delays experienced with the permit (Modesto) due to previously unidentified specific local requirements.
78	26310	TIM-133-12;DFM-7224-01 TEST 0.68MI MP 5.34-6.02 PH1	Ctr Vly		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	4,100.00 \$	6,038.29	2	2.9	No	There was a mismarked pipe feature for a bell hole so the excavation had to be expanded.
79	26310	TIM-133-12;DFM-7224-01 TEST 0.68MI MP 5.34-6.02 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	\$	2,300.00 \$	3,387.33	7	10.3	No	Delay to allow another project (non-PG&E) to complete due to traffic control conflicts.
80	26310	TIM-133-12;DFM-7224-01 TEST 0.68MI MP 5.34-6.02 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	29,000.00 \$	42,709.87	N/A	N/A	No	Additional traffic control was requested (Modesto) beyond the original permit requirements to ensure safety.
81	26310	TIM-133-12;DFM-7224-01 TEST 0.68MI MP 5.34-6.02 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	11,700.00 \$	17,231.22	N/A	N/A	No	During construction it was determined that an additional sniff hole was needed for safety.
82	26310	TIM-133-12;DFM-7224-01 TEST 0.68MI MP 5.34-6.02 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	11,700.00 \$	17,231.22	N/A	N/A	No	During construction it was determined that an additional 4 sniff holes were needed for safety.
83	25467	T-172-12;L-131_1 TEST 0.16MI MP 35.73- 35.87 PH1	Вау		Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	62,000.00 \$	392,405.06	N/A	N/A	No	There was an issue with obtaining Caltrans permit; additional costs incurred for standby time until the issue was resolved.
84	25467	T-172-12;L-131_1 TEST 0.16MI MP 35.73- 35.87 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	10,000.00 \$	63,291.14	N/A	N/A	No	An excavation was increased in size.
85	25467	T-172-12;L-131_1 TEST 0.16MI MP 35.73- 35.87 PH1	Вау	Unexpected Condition of Pipe, Valves or Fittings	Pipe, valves or fittings may be leaking or faulty requiring additional work to repair or replace them, not including linear indications on the pipe.	\$	18,000.00 \$	113,924.05	N/A	N/A	No	During construction, it was determined that a 10 foot section of pipe needed replacing because of external damage found.
86	26622	TIM-168-12;DFM-1614-08 TEST 0.44MI MP 0.56-1.00 PH1	Ctr Vly		Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	3,800.00 \$	8,636.36	N/A	N/A	No	Delays occurred acquiring the encroachment permit (City of Lodi).
87	26622	TIM-168-12;DFM-1614-08 TEST 0.44MI MP 0.56-1.00 PH1	Ctr Vly	From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	11,000.00 \$	25,000.00	N/A	N/A	No	During construction it was determined that an additional excavation was required.

Line #	New PSRS	Project Description	Region	Risk	Description	Cost Impact (\$)	Cost	Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10% Variance	Comments
88	26622	TIM-168-12;DFM-1614-08 TEST 0.44MI MP 0.56-1.00 PH1	Ctr Vly		Pipe, valves or fittings may be leaking or faulty requiring additional work to repair or replace them, not including linear indications on the pipe.	\$ 3,000.00	\$	6,818.18	N/A	N/A	No	Asbestos was encountered in the pipe coating requiring additional safety and disposal procedures.
89	26622	TIM-168-12;DFM-1614-08 TEST 0.44MI MP 0.56-1.00 PH1	Ctr Vly		Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$ 17,000.00	\$	38,636.36	1	1.1	No	Traffic detection loops were unexpectedly encountered during construction. The city inspection closed the site for half a day for repairs.
90	26623	TIM-169-12;L-197B TEST 4.4MI MP 0.00-4.47 PH1	Ctr Vly	Strength Test	Cleaning Hg from piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$ 115,000.00	\$	26,136.36	N/A	N/A	No	High levels of mercury were encountered requiring additional costs to clean the pipe prior to testing.
91	26623	TIM-169-12;L-197B TEST 4.4MI MP 0.00-4.47 PH1	Ctr Vly		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 2,200.00	\$	500.00	N/A	N/A	No	A larger safety radius than planned was required for the hydrotest.
92	26623	TIM-169-12;L-197B TEST 4.4MI MP 0.00-4.47 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 23,500.00	\$	5,340.91	N/A	N/A	No	An additional sniff hole required which resulted in additional labor costs - excavation and stand-by time.
93	26623	TIM-169-12;L-197B TEST 4.4MI MP 0.00-4.47 PH1	Ctr Vly		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 5,500.00	\$	1,250.00	N/A	N/A	No	Additional fabrication (welding) was required because the field conditions did not match what was expected.
94	26620	TIM-166-12;DFM-1301-01 TEST 4.66MI MP 0.00-4.63 PH1	North		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 44,400.00	\$	9,538.13	N/A	N/A	No	An additional bell hole was required because the test heads would not fit as planned due to conflicting utilities.
95	26620	TIM-166-12;DFM-1301-01 TEST 4.66MI MP 0.00-4.63 PH1	North		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 102,000.00	\$	21,911.92	N/A	N/A	No	An additional bell hole was required because the pipe features were not where the drawings showed them.
96	25883	T-092-12;L-210B TEST 2.82MI MP 22.98-25.98 PH1	Вау		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 24,400.00	\$	8,652.48	N/A	N/A	No	There was a shallow water line not shown on the drawings; plates had to be installed.
97	25883	T-092-12;L-210B TEST 2.82MI MP 22.98-25.98 PH1	Вау		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 35,000.00	\$	12,411.35	N/A	N/A	No	During construction it was determined that an additional three sniff holes were needed for safety.
98	25883	T-092-12;L-210B TEST 2.82MI MP 22.98-25.98 PH1	Вау	Contaminated Test Water (other than Hg)	Any variety of contaminants could be found in the water and require additional costs to sample, clean,	\$ 57,000.00	\$	20,212.77	N/A	N/A	No	There were unexpected constituents in the water so sampling, storage and additional hauling costs were incurred.
99	26326	TIM-136-12;DFM-1614-01 TEST 3.97MI MP 0.00-3.97 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 39,000.00	\$	9,823.68	N/A	N/A	Yes	During construction it was determined that to complete the project additional welds and revisions to the plans were required.
100	26326	TIM-136-12;DFM-1614-01 TEST 3.97MI MP 0.00-3.97 PH1	Ctr Vly	Strength Test	Cleaning Hg from piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$ 27,500.00	\$	6,926.95	N/A	N/A	Yes	High mercury was encountered requiring additional costs to clean the pipe prior to testing.
101	26326	TIM-136-12;DFM-1614-01 TEST 3.97MI MP 0.00-3.97 PH1	Ctr Vly	Hydrostatic Test Rupture/Leak	Potential rupture or leak during a hydrostatic test results in increased cost.	\$ 276,000.00	\$	69,521.41	N/A	N/A	Yes	A leak was discovered during the test. Additional costs were incurred to locate, excavate, and repair the pipeline.
102	26326	TIM-136-12;DFM-1614-01 TEST 3.97MI MP 0.00-3.97 PH1	Ctr Vly	Field Conditions Differ	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 6,800.00	\$	1,712.85	N/A	N/A	Yes	Additional 6" welds were required.
103	26326	TIM-136-12;DFM-1614-01 TEST 3.97MI MP 0.00-3.97 PH1	Ctr Vly		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 21,200.00	\$	5,340.05	N/A	N/A	Yes	An assembly was cut out and rebuilt to meet Code.
104	26326	TIM-136-12;DFM-1614-01 TEST 3.97MI MP 0.00-3.97 PH1	Ctr Vly		As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 2,000.00	\$	503.78	N/A	N/A	Yes	Additional fabrication was required.
105	26326	TIM-136-12;DFM-1614-01 TEST 3.97MI MP 0.00-3.97 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 167,000.00	\$	42,065.49	N/A	N/A	Yes	During construction additional traffic control beyond what was required by the permit to ensure safety (City of Lodi).
106	25394	T-061-12;L-300A_2 TEST 2.12MI MP 372.87- 374.26 PH1	Ctr Vly		Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	\$ 100,000.00	\$	47,169.81	14	6.6	No	Additional costs were incurred for De-mobilization and Mobilization to allow crews to go home for the holiday season.

Line #	New PSRS	Project Description	Region	Risk	Description	Cos	st Impact (\$)	Cost Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10% Variance	Comments
107	25905	TIM-102A-12;L-118A TEST 0.18MI MP 0.00- 0.18 PH1	Ctr Vly	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	2,000.00	\$ 11,049.72	N/A	N/A	No	The encroachment/Traffic Control plan had to be separated to just show Fresno only (change order).
108	25901	T-045-12;L-138 TEST 6.51MI MP 28.64-35.91 PH1	Ctr Vly	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	6,800.00	\$ 1,044.23	N/A	N/A	No	Unplanned support was provided because sufficient resources were not available at the time needed.
109	25810	T-047-12;L-138 TEST 0.16MI MP 45.39-45.56 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A	N/A	10	61.0	No	Scheduling conflicts occurred with T&R and GC. GC did not have the tapping truck available when T&R was available.
110	26317	TIM-155-12;L-138D TEST 1.54MI MP 45.10- 46.64 PH1	Ctr Vly	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	10,000.00	\$ 6,501.95	N/A	N/A	No	Equipment support was provided to GC during the tie-in.
111	26317	TIM-155-12;L-138D TEST 1.54MI MP 45.10- 46.64 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A	N/A	10	6.5	No	The clearance was delayed until resources from GC and T&R were available because of other jobs in the vicinity.
112	28278	TIM-180-12;L-191-1 TEST 0.6MI MP 34.70- 35.28 PH1	Вау	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	10,000.00	\$ 16,666.67	N/A	N/A	No	Equipment support was provided to GC during the tie-in.
113	26331	PR-005-12;L-148 TEST 0.04MI MP 0.93-1.43 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	27,000.00	\$ 710,526.32	N/A	N/A	No	An additional sniff hole was necessary for safety.
114	26331	PR-005-12;L-148 TEST 0.04MI MP 0.93-1.43 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	12,000.00	\$ 315,789.47	N/A	N/A	No	An additional excavation was required due to a bridge being built over a valve that was not there during the bid walk.
115	26331	PR-005-12;L-148 TEST 0.04MI MP 0.93-1.43 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	20,000.00	\$ 526,315.79	N/A	N/A	No	Additional welding was necessary to accommodate a design change made after IFB.
116	25826	T-055-12;L-300A_2 TEST 0.92MI MP 230.32- 231.20 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A	N/A	10	10.9	No	Construction resources were unavailable (welders and equipment) when needed, impacting productivity.
117	25826	T-055-12;L-300A_2 TEST 0.92MI MP 230.32- 231.20 PH1	Ctr Vly	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	57,000.00	\$ 62,295.08	N/A	N/A	No	Unplanned support was provided because sufficient resources were not available at the time needed.
118	25826	T-055-12;L-300A_2 TEST 0.92MI MP 230.32- 231.20 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	24,000.00	\$ 26,229.51	N/A	N/A	No	The test was split, but there was a bend where the split was planned so a new location had to be chosen resulting in an additional excavation.
119	25830	T-059-12;L-300A_2 TEST 0.26MI MP 277.89- 278.12 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	\$	20,000.00	\$ 77,519.38	N/A	N/A	No	The test heads shipped without proper valves, which then had to be installed prior to the test.
120	25830	T-059-12;L-300A_2 TEST 0.26MI MP 277.89- 278.12 PH1	Ctr Vly	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	68,000.00	\$ 263,565.89	N/A	N/A	No	Additional excavation depth required - bid drawings had assumed a more shallow depth for both the test locations and sniff holes.
121	25830	T-059-12;L-300A_2 TEST 0.26MI MP 277.89- 278.12 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	80,000.00	\$ 310,077.52	N/A	N/A	No	Customer service requirements restricted clearance to weekends resulting in additional construction labor (additional crews and extended hours) to meet revised schedule.
122	25830	T-059-12;L-300A_2 TEST 0.26MI MP 277.89- 278.12 PH1	Ctr Vly	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	75,000.00	\$ 290,697.67	N/A	N/A	No	Unplanned support was provided because sufficient resources were not available at the time needed.

Line #	New PSRS	Project Description	Region	Risk	Description	Cost Impact (\$)	Cost Im	npact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10% Variance	Comments
123	25822	T-053-12;L-142S TEST 0.63MI MP 3.21-3.87 PH1	Ctr Vly	Mercury Cleaning - Strength Test	Cleaning piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$ 65,000.00	\$	103,338.63	N/A	N/A	No	High mercury was encountered requiring additional costs to clean the pipe prior to testing.
124	25822	T-053-12;L-142S TEST 0.63MI MP 3.21-3.87 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 12,000.00	\$	19,077.90	N/A	N/A	No	GC required an additional sniff hole for safety.
125	25822	T-053-12;L-142S TEST 0.63MI MP 3.21-3.87 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 67,000.00	\$	106,518.28	N/A	N/A	No	The cost of re-paving was inadvertently excluded from the bid and final contract agreement.
126	25822	T-053-12;L-142S TEST 0.63MI MP 3.21-3.87 PH1	Ctr Vly	Shoring	There may be a lack of or insufficient shoring which could result in a number of issues causing delays and costs to install or reinforce the shoring.	N/A		N/A	3	4.8	No	The project was delayed due to a public safety incident caused by the failure of construction resources to install appropriate temporary shoring.
127	25812	T-048-12;L-142N TEST 3.14MI MP 0.00-3.16 PH1	Ctr Vly	Mercury Cleaning - Strength Test	Cleaning piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$ 100,000.00	\$	31,847.13	N/A	N/A	No	High mercury was encountered requiring additional costs to clean the pipe prior to testing.
128	25824	T-054-12;L-142S TEST 1.04MI MP 10.45-11.48 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 29,000.00	\$	27,911.45	N/A	N/A	No	An additional sniff hole was necessary for safety in a city street.
129	25824	T-054-12;L-142S TEST 1.04MI MP 10.45-11.48 PH1	Ctr Vly	Linear Indications	Linear indications may be encountered when excavation and require repair or replacement.	\$ 13,000.00	\$	12,512.03	N/A	N/A	No	A section of pipe was replaced because of a linear indication found during construction
130	25816	T-049-12;L-142N TEST 3.53MI MP 3.16-6.69 PH1	Ctr Vly	Mercury Cleaning - Strength Test	Cleaning piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$ 50,000.00	\$	14,184.40	N/A	N/A	No	High mercury was encountered requiring additional costs to clean the pipe prior to testing.
131	25816	T-049-12;L-142N TEST 3.53MI MP 3.16-6.69 PH1	Ctr Vly	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$ 20,000.00	\$	5,673.76	N/A	N/A	No	Costs were incurred to make changes.
132	25821	T-052-12;L-152S TEST 0.65MI MP 0.02-0.69 PH1	Ctr Vly	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$ 20,000.00	\$	30,816.64	1	1.5	No	Biologist assessment of Kit Fox presence in staging area deemed area unusable and required additional time to acquire land for a new staging area with cordon.
133	25821	T-052-12;L-152S TEST 0.65MI MP 0.02-0.69 PH1	Ctr Vly	Mercury Cleaning - Strength Test	Cleaning piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$ 120,000.00	\$	184,899.85	N/A	N/A	No	High mercury was encountered requiring additional costs to clean the pipe prior to testing.
134	25821	T-052-12;L-152S TEST 0.65MI MP 0.02-0.69 PH1	Ctr Vly	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 12,000.00	\$	18,489.98	N/A	N/A	No	GC required an additional sniff hole for safety.
135	26322	TIM-125-12;L-109_3 TEST 0.62MI MP 21.42- 22.23 PH1	Ctr Cst	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$ 95,000.00	\$	154,471.54	N/A	N/A	No	Unplanned support was provided because sufficient resources were not available at the time needed.
136	26323	TIM-126-12;L-109_3 TEST 0.96MI MP 18.56- 19.55 PH1	Ctr Cst	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$ 40,000.00	\$	41,710.11	N/A	N/A	No	Unplanned support was provided because sufficient resources were not available at the time needed.
137	25926	T-110-12;L-300A_1 TEST 3.85MI MP 446.48- 449.71 PH1	Ctr Cst	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$ 40,000.00	\$	10,384.22	N/A	N/A	No	Presence of CA Tiger Salamanders required laying of steel plates around station where valves were being turned. It was not possible to anticipate this issue at IFB as clearance details had not yet been determined.
138	25926	T-110-12;L-300A_1 TEST 3.85MI MP 446.48- 449.71 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 150,000.00	\$	38,940.81	N/A	N/A	No	The test had to be split and additional Baker Tanks were needed
139	26318	TIM-159-12;L-181B TEST 0.46MI MP 4.08-4.51 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$ 15,000.00	\$	32,537.96	N/A	N/A	No	Strength Test costs assumed to match original PSEP filing estimates proved to be insufficient.
140	26318	TIM-159-12;L-181B TEST 0.46MI MP 4.08-4.51 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 100,000.00	\$	216,919.74	N/A	N/A	No	Site conditions necessitated additional preparations for the site staging area and excavations for CNG/LNG that were not included in IFB.

Line #	New PSRS	Project Description	Region	Risk	Description	Co	st Impact (\$)	Cos	t Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10 Varia
141	26327	TIM-140-12;L-103 TEST 0.22MI MP 15.64- 15.86 PH1	Ctr Cst	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	61,000.00	\$	274,774.77	6	27.0	No
142	26329	TIM-142-12;L-103 TEST 2.45MI MP 25.31- 27.77 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	40,000.00	\$	16,326.53	N/A	N/A	No
143	26341	TIM-150-12;DFM-0813-02 TEST 0.31MI MP 0.00-0.31 PH1	Ctr Cst	Unexpected Condition of Pipe, Valves or Fittings	Pipe, valves or fittings may be leaking or faulty requiring additional work to repair or replace them, not including linear indications on the pipe.	\$	30,000.00	\$	98,039.22	N/A	N/A	No
144	25862	TIM-024-12;DFM-0813-01 TEST 3.30MI MP 0.03-1.29 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	200,000.00	\$	153,491.94	N/A	N/A	No
145	25862 / 26340 / 26341	TIM-024-12/TIM-149-12/TIM-150-12;DFM- 0813-01/02/05 TEST 2.11MI	Ctr Cst	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	50,000.00	\$	23,663.04	N/A	N/A	No
146	25877 / 25879	T-089-12/T-090-12;L-210B TEST 8.55MI MP 7.57-15.61 PH1	North	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).		N/A		N/A	4	0.5	No
147	25879	T-090-12;L-210B TEST 5.14MI MP 10.82-15.61 PH1	North	Unexpected Condition of Pipe, Valves or Fittings	Pipe, valves or fittings may be leaking or faulty requiring additional work to repair or replace them, not including linear indications on the pipe.	\$	25,000.00	\$	4,867.60	N/A	N/A	No
148	25879	T-090-12;L-210B TEST 5.14MI MP 10.82-15.61 PH1	North	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.		N/A		N/A	N/A	N/A	No
149	24499 / 26783	T-057E-11/T-057W-11;L-300A TEST 1.65MI MP 181.45-182.34 & 187.85-188.41 PH1	Ctr Vly	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	200,000.00	\$	120,992.14	N/A	N/A	No
150	26478	TIM-019-12;L-153_2 TEST 2.41MI MP 22.87- 25.11 PH1	Bay	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A		N/A	5	2.1	No
151	26476	T-047C-11;L-153_1 TEST 2.80MI MP 20.07- 22.87 PH1	Вау	Pigging	Potential issues may occur while pigging the line that cause delays or cost increases to resolve them.	\$	200,000.00	\$	71,377.59	6	2.1	No
152	26475	TIM-020-12;L-153_2 TEST 2.77MI MP 25.11- 27.88 PH1	Вау	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	120,000.00	\$	43,383.95	N/A	N/A	No
153	27746	T-025B-11;L-132_1 TEST 0.64MI MP 4.29-4.92 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	26,000.00	\$	40,816.33	2	3.1	Ye
154	27746	T-025B-11;L-132_1 TEST 0.64MI MP 4.29-4.92 PH1	Ctr Cst	Mercury Cleaning - Strength Test	Cleaning piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$	160,000.00	\$	251,177.39	10	15.7	Ye
155	27746	T-025B-11;L-132_1 TEST 0.64MI MP 4.29-4.92 PH1	Ctr Cst	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	28,000.00	\$	43,956.04	N/A	N/A	Ye
156	27746	T-025B-11;L-132_1 TEST 0.64MI MP 4.29-4.92 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	36,000.00		56,514.91	4	6.3	Ye
157	27746	T-025B-11;L-132_1 TEST 0.64MI MP 4.29-4.92 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	4,000.00	\$	6,279.43	N/A	N/A	Ye

10% 'iance	Comments
No	The drawings compared to actual conditions were off by a few feet so the line was under a paved road which required the encroachment permit to be revised and for additional traffic control.
No	Due to limited CNG availability, the scope was changed to install a pressure control fitting rather than supplying multiple CNG points.
No	The pipe was found to have a lamination defect so the entire joint was excavated and was replaced with new pipe.
No	A drip was found near the creek and could not be excavated or removed. Since the drip would not allow a pig to conduct a water test, the test was split into 3 portions with the part near the creek being nitrogen tested. This work had to be re-engineered and three tests required more welding and construction time.
No	Unplanned support was provided because sufficient resources were not available at the time needed.
No	There were delays acquiring the Caltrans permit.
No	A valve leak had to be replaced.
No	A mainline valve was installed because a power plant needed to be supplied during the test process.
No	One State permit conflicted with another so there were additional costs for restoration.
No	Unplanned support was provided because sufficient resources were not available at the time needed.
No	While running cleaning Pigs through the line the discharge piping installed on the pig receiver broke. Cleaning solution was sprayed in a mist onto a residential street in Oakland. The costs were incurred to clean the entire area.
No	A 70 ft. hole was dug looking for a pipeline feature that needed to be removed. The drawing was approximately 60 ft. off from where the feature was found. Additional costs were incurred to perform the digging.
Yes	A coupon had to be installed that was not planned due to the shape of the line.
Yes	Site-specific cleaning requirements stated that the water had to be cleaned to drinking water standards (5 parts per billion (ppb) instead of 150ppb). It was unknown prior to the test how many cleaning runs would be required to clean to this level.
Yes	An excavation had to be expanded beyond the initial plan to accommodate construction.
Yes	Related to the cleaning requirements, the test was split into 2 so additional test heads were needed.
Yes	There were noise complaints so a sound wall was built.

Line #	New PSRS	Project Description	Region	Risk	Description	Co	st Impact (\$)	Cost	Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10 Varia
158	26320	TIM-123-12;L-109_4 TEST 2.26MI MP 31.52- 32.81 PH1	Ctr Cst	Mercury Cleaning - Strength Test	Cleaning piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$	23,000.00	\$	10,176.99	N/A	N/A	No
159	26320	TIM-123-12;L-109_4 TEST 2.26MI MP 31.52- 32.81 PH1	Ctr Cst	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	10,000.00	\$	4,424.78	N/A	N/A	No
160	26320	TIM-123-12;L-109_4 TEST 2.26MI MP 31.52- 32.81 PH1	Ctr Cst	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	9,000.00	\$	3,982.30	1	0.4	No
161	26320	TIM-123-12;L-109_4 TEST 2.26MI MP 31.52- 32.81 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	13,000.00	\$	5,752.21	1	0.4	No
162	26320	TIM-123-12;L-109_4 TEST 2.26MI MP 31.52- 32.81 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	3,000.00	\$	1,327.43	N/A	N/A	No
163	25917	T-104-12;L-132_1 TEST 3.51MI MP 25.60- 29.06 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	9,000.00	\$	2,564.10	1	0.3	No
164	25917	T-104-12;L-132_1 TEST 3.51MI MP 25.60- 29.06 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	23,000.00	\$	6,552.71	1	0.3	No
165	25917	T-104-12;L-132_1 TEST 3.51MI MP 25.60- 29.06 PH1	Ctr Cst	Mercury Cleaning - Strength Test	Cleaning piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$	65,000.00	\$	18,518.52	N/A	N/A	No
166	25917	T-104-12;L-132_1 TEST 3.51MI MP 25.60- 29.06 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	17,000.00	\$	4,843.30	N/A	N/A	No
167	25917	T-104-12;L-132_1 TEST 3.51MI MP 25.60- 29.06 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	6,000.00	\$	1,709.40	N/A	N/A	No
168	25917	T-104-12;L-132_1 TEST 3.51MI MP 25.60- 29.06 PH1	Ctr Cst	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	54,000.00	\$	15,384.62	N/A	N/A	No
169	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	40,000.00	\$	11,001.10	N/A	N/A	No
170	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	46,000.00	\$	12,651.27	N/A	N/A	No
171	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance,	\$	18,000.00	\$	4,950.50	N/A	N/A	No
172	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Mercury Cleaning - Strength Test	Cleaning piping associated prior to strength testing. This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing.	\$	152,000.00	\$	41,804.18	N/A	N/A	No
173	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	75,000.00	\$	20,627.06	N/A	N/A	No
		MP 41.90-43.47 & 43.49-45.15 PH1 TIM-013A-12/T-013B-12;L-109 TEST 3.64MI		Strength Test Field Conditions Differ	This includes the requirement to meet drinking water standards of rinse water prior to hydrostatically testing. As-built drawings and/or GIS were believed to be accurate according to records, but did not match							

10% iance	Comments
No	Cost to clean to drinking water standards (5ppb). It was unknown prior to the test how many cleaning runs would be required to clean to this level.
No	A 30" manifold had to be modified, which was not planned for in the original design.
No	Unplanned support was provided because sufficient resources were not available at the time needed.
No	An additional sniff hole was necessary for safety.
No	A 4" valve was installed out of necessity for clearance.
No	There was stand-by time while waiting for the permit from the San Francisco Public Utilities Commission (SFPUC) so that work could begin.
No	An additional sniff hole and other equipment were necessary for the clearance.
No	Cost to clean to drinking water standards (5ppb). It was unknown prior to the test how many cleaning runs would be required to clean to this level.
No	The SFPUC permit only provided for limited work hours. Additional hours were granted on Saturdays so additional labor costs were incurred.
No	Related to the SFPUC permit, double walled 'frac' tanks had to be used based on the permit, so additional costs were incurred to rent.
No	Additional dig locations and more compressors were necessary than planned.
No	The piping that carried water to the site crossed a road/path so it had to be protected. A ramp was constructed over the piping.
No	In accordance with the SFPUC notification was required when changes were made to testing process – changes required moving the test water further.
No	There was stand-by time while waiting for the permit from the SFPUC so that work could begin.
No	Cost to clean to drinking water standards (5ppb). It was unknown prior to the test how many cleaning runs would be required to clean to this level.
No	A bell-hole had to be expanded to accommodate the construction.

Line #	New PSRS	Project Description	Region	Risk	Description	Cos	t Impact (\$)	Cos	t Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10 Variar
174	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	50,000.00	\$	13,751.38	N/A	N/A	No
175	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	34,000.00	\$	9,350.94	N/A	N/A	No
176	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	70,000.00	\$	19,251.93	4	1.1	No
177	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Support for Other Work Teams	Unplanned support (equipment or labor) was provided to other teams such as GC, CNG, or LNG because they did not have sufficient resources available at the time that they were needed.	\$	10,000.00	\$	2,750.28	N/A	N/A	No
178	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Unexpected Condition of Pipe, Valves or Fittings	Pipe, valves or fittings may be leaking or faulty requiring additional work to repair or replace them, not including linear indications on the pipe.	\$	230,000.00	\$	63,256.33	N/A	N/A	No
179	25838 / 26265	TIM-013A-12/T-013B-12;L-109 TEST 3.64MI MP 41.90-43.47 & 43.49-45.15 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	292,000.00	\$	80,308.03	N/A	N/A	No
180	23816	R-004;L-142S REPL 1.04MI MP5.32-6.35 PH1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.		TBD		N/A	2	1.9	No
181	23816	R-004;L-142S REPL 1.04MI MP5.32-6.35 PH1	Ctr Vly	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.))	TBD		N/A	12	11.5	No
182	23816	R-004;L-142S REPL 1.04MI MP5.32-6.35 PH1	Ctr Vly	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)		365,000.00	\$	350,961.54	N/A	N/A	No
183	23816	R-004;L-142S REPL 1.04MI MP5.32-6.35 PH1	Ctr Vly	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)	\$	500,000.00	\$	480,769.23	N/A	N/A	No
184	23797	R-012;L-167-1 REPL 2.09MI MP 4.45-6.55 PH1	North	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.		N/A		N/A	5	2.4	Yes
185	23797	R-012;L-167-1 REPL 2.09MI MP 4.45-6.55 PH1	North	Dewatering	A high water table is encountered resulting in unplanned dewatering costs and delays in construction.		N/A		N/A	N/A	N/A	Yes
186	23797	R-012;L-167-1 REPL 2.09MI MP 4.45-6.55 PH1	North	Mercury Cleaning - Pipe Replacement	Cleaning piping associated with asset retirement.	\$	200,000.00	\$	95,693.78	N/A	N/A	Yes
187	23797	R-012;L-167-1 REPL 2.09MI MP 4.45-6.55 PH1	North	Unstable/Weak Soil	Unstable soils may require additional shoring which may cause delays to obtain and install.		N/A		N/A	30	14.4	Yes
188	27572	R-013;L-210A East REPL 0.61MI MP 19.69- 20.22 PH1	North	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.	\$	50,000.00	\$	81,967.21	1	1.6	No

>10% ariance	Comments
No	The initial location (a manhole) planned for water discharge was not where it was expected to be so a new one had to be found.
No	Work had to be modified to coordinate with nearby work at Sullivan Station.
No	In order to meet the scheduled tie-in, the design was altered, changing the method of movement from part A to B – this caused the water to be moved a further distance than initially planned.
No	Unplanned support was provided because sufficient resources were not available at the time needed.
No	A 16" ball valve was leaking so there were costs to identify, fix and replace it.
No	When dewatering the line as the water went into the 'frac' tanks the mercaptan was venting off of the water. The odor alarmed a nearby business so they evacuated. Carbon filters were rented to prevent the odor from venting.
No	Material delivery delays occurred resulting in costs increases to relocate the crew in the meantime.
No	Not enough time scheduled between project Notice to Proceed and Mobilization. Needs to be at least 2 weeks for encroachment permit.
No	Delays to the schedule and increased cost due to limited work hours permitted under traffic control plans. Later, were able to negotiate for longer work hours (10hrs/day) and worked weekends (higher wage costs) to make up the time.
No	City requested that the trenching design be redesigned from 2' to 8' asphalt for safety causing additional costs and delays.
Yes	Crew had to wait on delayed fill materials for trench.
Yes	Crew encountered unexpected groundwater.
Yes	Pipe testing indicated contaminants requiring future pipe cleaning and waste management. Amount reflects estimate of cost to reopen holes and clean.
Yes	Crew encountered unstable soils at culvert crossings so there was a delay to obtain and install additional shoring equipment.
No	Delayed availability of PG&E T & R resources to execute tie-in. Diesel fluid discovered during P/L cleaning (from prior ILI cleaning operations). Extended clearance and tie-in to 48 hours.

Line #	New PSRS	Project Description	Region	Risk	Description	Cost Impact (\$)	Cost	Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10% Variance	Comments
189	27572	R-013;L-210A East REPL 0.61MI MP 19.69- 20.22 PH1	North	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$ 50,000.00	\$	81,967.21	N/A	N/A	No	Unmarked utility lines slowed the crew down through Univ. of Phoenix parking lot.
190	27572	R-013;L-210A East REPL 0.61MI MP 19.69- 20.22 PH1	North	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$ 50,000.00	\$	81,967.21	N/A	N/A	No	Construction delayed due to red-legged frog spotted on private property.
191	27572	R-013;L-210A East REPL 0.61MI MP 19.69- 20.22 PH1	North	Mercury Cleaning - Pipe Replacement	Cleaning piping associated with asset retirement.	\$ 200,000.00	\$	327,868.85	N/A	N/A	No	Pipe testing indicated contaminants requiring future pipe cleaning and waste management. Amount reflects estimate of cost to reopen holes and clean.
192	23875	R-072;DFM-1503-01 DEACTIVATE 0.93MI MP 0.00-0.92 PH1	North	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	N/A		N/A	10	10.8	No	Environmental site review required at Yuba City Holder, inspectin for endangered Elderberry bushes and Elderberry Beetles. No plants discovered.
193	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Вау	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.	\$ 79,000.00	\$	272,413.79	4	13.8	Yes	Additional hazardous materials procedures required to complete cold-cuts of pipeline after testing indicated contaminants requirin future pipe cleaning and waste management.
194	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Вау	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$ 26,000.00	\$	89,655.17	1	3.4	Yes	Fire access impeded workspace and added worksite delineation. Double set-up and breakdown was required.
195	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Вау	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	N/A		N/A	1	1.7	Yes	A nesting bird was found near site. Needed to delineate 50 foot radius to avoid disturbing the bird.
196	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Вау	Dewatering	A high water table is encountered resulting in unplanned dewatering costs and delays in construction.	N/A		N/A	N/A	N/A	Yes	Ground water was expected prior to construction so costs were captured in bid rather than a subsequent change.
197	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Вау	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)	\$ 64,000.00	\$	220,689.66	2	6.9	Yes	Safety considerations identified by local PG&E resources required additional laydown area after bid. Original laydown was in the terminal station with additional costs incurred for double handlin soils.
198	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 800.00	\$	2,758.62	1	3.4	Yes	Added 24-hour policy to spray coat prior to welding.
199	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Bay	Mercury Cleaning - Pipe Replacement	Cleaning piping associated with asset retirement.	N/A		N/A	N/A	N/A	Yes	See Productivity Impacts above.
200	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Вау	Damage to Property During Construction	Damage to Property During Construction	\$ 15,000.00	\$	51,724.14	2	6.9	Yes	Construction resources damaged monitoring wells owned by adjacent property owners so repairs were necessary.
201	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 28,000.00	\$	96,551.72	1	3.4	Yes	Changed requirement to hydrotest caps prior to installation.
202	23746	R-017;L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 20,000.00	\$	68,965.52	1	3.4	Yes	Work Required by others: Added scope at the request of adjacent property owner. Cathodic Automated Testing Station (CATS) unit above ground used for corrosion prevention landed within adjacent owner's access to marina slips.
203	23772	R-020;L-181A REPL 1.73MI MP 15.31-16.81 PH1	Ctr Cst	Weather Impacts	Potential construction delays and resulting additional costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.	\$ 10,000.00	\$	5,780.35	4	2.3	No	Work had to be stopped due to rain.
204	23772	R-020;L-181A REPL 1.73MI MP 15.31-16.81 PH1	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.	\$ 130,000.00	\$	75,144.51	10	5.8	No	Materials were delayed in arriving and the wrong valve systems were delivered.
205	23772	R-020;L-181A REPL 1.73MI MP 15.31-16.81 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)	\$ 180,000.00	\$	104,046.24	8	4.6	No	Multiple permitting issues.
206	23772	R-020;L-181A REPL 1.73MI MP 15.31-16.81 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 150,000.00	\$	86,705.20	6	3.5	No	Additional construction to ensure future piggability of line added to the project scope.

Line #	New PSRS	Project Description	Region	Risk	Description	Cost Impact (\$)	Cost Impact (\$/mi)	Schedule Impact	Schedule Impact	>10%	Comments
207	23364	R-025;L-109_1 REPL 1.12MI MP 3.41-4.45 PH1	Ctr Cst	Weather Impacts	Potential construction delays and resulting additional	\$ 23,000.00		(days) 3	(days/mi) 2.7	Variance No	Rain delayed the project for a total of three shut down days as the
		Spread 1			costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.						HDD Permit requires work to stop once it rained for 72 hours.
208	23364	R-025;L-109_1 REPL 1.12MI MP 3.41-4.45 PH1 Spread 1	Ctr Cst	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$ 500,000.00	\$ 446,428.57	20	17.9	No	This is the cost to re-design a portion of the pipeline replacement from direct bury and an Horizontal Directional Drill (HDD) to one long HDD in order to avoid unidentified utilities, safely construct beneath a drainage canal and stay within PG&E's existing pipeline easement.
209	23364	R-025;L-109_1 REPL 1.12MI MP 3.41-4.45 PH1 Spread 1	Ctr Cst	Dewatering	A high water table is encountered resulting in unplanned dewatering costs and delays in construction.	\$ 150,000.00	\$ 133,928.57	10	8.9	No	A considerable amount of water had to be pumped out of the trench and the amount would have been much greater if the HDD had not been extended.
210	23364	R-025;L-109_1 REPL 1.12MI MP 3.41-4.45 PH1 Spread 1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)	\$ 300,000.00	\$ 267,857.14	15	13.4	No	Unanticipated permit restraints on working hours and time of day, e.g. night-time construction and short work-hours.
211	23364	R-025;L-109_1 REPL 1.12MI MP 3.41-4.45 PH1 Spread 1	Ctr Cst	Mercury Cleaning - Pipe Replacement	Cleaning piping associated with asset retirement.	\$ 200,000.00	\$ 178,571.43	N/A	N/A	No	Pipe testing indicated contaminants requiring future pipe cleaning and waste management. Amount reflects estimate of cost to reopen holes and clean.
212	23364	R-025;L-109_1 REPL 1.12MI MP 3.41-4.45 PH1 Spread 1	Ctr Cst	Low Estimate	Specific cost assumptions in the Job Estimate prove to be inaccurate.	\$ 500,000.00	\$ 446,428.57	N/A	N/A	No	Strength Test costs assumed to match original PSEP filing estimates proved to be insufficient.
213	23295	R-027;L-109_1 REPL 1.1MI MP 5.60-6.72 PH1 Spread 4	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.	\$ 45,000.00	\$ 40,909.09	1	0.9	No	Work had to be moved to another portion of the project on multiple occasions due to a variety of issues.
214	23295	R-027;L-109_1 REPL 1.1MI MP 5.60-6.72 PH1 Spread 4	Ctr Cst	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$ 130,000.00	\$ 118,181.82	5	4.5	No	A median and sidewalk had to be replaced due to unmarked utilities during design.
215	23295	R-027;L-109_1 REPL 1.1MI MP 5.60-6.72 PH1 Spread 4	Ctr Cst	Dewatering	A high water table is encountered resulting in unplanned dewatering costs and delays in construction.	\$ 300,000.00	\$ 272,727.27	4	3.6	No	Water table is extremely high.
216	23295	R-027;L-109_1 REPL 1.1MI MP 5.60-6.72 PH1 Spread 4	Ctr Cst	Mercury Cleaning - Pipe Replacement	Cleaning Hg from piping associated with asset retirement.	\$ 200,000.00	\$ 181,818.18	N/A	N/A	No	Pipe testing indicated contaminants requiring future pipe cleaning and waste management. Amount reflects estimate of cost to reopen holes and clean.
217	23295	R-027;L-109_1 REPL 1.1MI MP 5.60-6.72 PH1 Spread 4	Ctr Cst	Low Estimate	Specific cost assumptions in the Job Estimate prove to be inaccurate.	\$ 300,000.00	\$ 272,727.27	N/A	N/A	No	Strength Test costs assumed to match original PSEP filing estimates proved to be insufficient.
218	23366	R-029;L-109_1 REPL 0.61MI MP 9.27-9.89 PH1 Spread 6	Ctr Cst	Weather Impacts	Potential construction delays and resulting additional costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.	\$ 46,000.00	\$ 75,409.84	2	3.3	No	Weather prevented de-watering due to a permit requiring work to stop during rain resulting in a shut down for 2 days.
219	23366	R-029;L-109_1 REPL 0.61MI MP 9.27-9.89 PH1 Spread 6	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.	\$ 180,000.00	\$ 295,081.97	N/A	N/A	No	Work had to be moved to another portion of the project on multiple occasions due to a variety of issues.
220	23366	R-029;L-109_1 REPL 0.61MI MP 9.27-9.89 PH1 Spread 6	Ctr Cst	Contaminated Soil	Contaminated soil found on a site during excavation. Potential costs associated with contaminated soil handling, storage, hauling and disposal.	\$ 331,000.00	\$ 542,622.95	6	9.8	No	Contaminated soil was encountered which caused a one week shut down. Haul-off plus delays are included in the cost estimate.
221	23366	R-029;L-109_1 REPL 0.61MI MP 9.27-9.89 PH1 Spread 6	Ctr Cst	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$ 250,000.00	\$ 409,836.07	10	16.4	No	A median and sidewalk had to be replaced due to unmarked utilities during design.
222	23366	R-029;L-109_1 REPL 0.61MI MP 9.27-9.89 PH1 Spread 6	Ctr Cst	Dewatering	A high water table is encountered resulting in unplanned dewatering costs and delays in construction.	\$ 1,600,000.00	\$ 2,622,950.82	6	9.8	No	Over 20,000,000 gallons of water were pumped.

Line #	New PSRS	Project Description	Region	Risk	Description	Co	st Impact (\$)	Cos	t Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10 Varia
223	23366	R-029;L-109_1 REPL 0.61MI MP 9.27-9.89 PH1 Spread 6	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)		300,000.00	\$	491,803.28	15	24.6	No
224	23366	R-029;L-109_1 REPL 0.61MI MP 9.27-9.89 PH1 Spread 6	Ctr Cst	Mercury Cleaning - Pipe Replacement	Cleaning Hg from piping associated with asset retirement.	\$	200,000.00	\$	327,868.85	N/A	N/A	No
225	23366	R-029;L-109_1 REPL 0.61MI MP 9.27-9.89 PH1 Spread 6	Ctr Cst	Low Estimate	Specific cost assumptions in the Job Estimate prove to be inaccurate.	\$	500,000.00	\$	819,672.13	N/A	N/A	No
226	23365	R-028;L-109_1 REPL 0.53MI MP 7.04-7.57 PH1 Spread 5	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.	\$	220,000.00	\$	415,094.34	10	18.9	No
227	23365	R-028;L-109_1 REPL 0.53MI MP 7.04-7.57 PH1 Spread 5	Ctr Cst	Dewatering	A high water table is encountered resulting in unplanned dewatering costs and delays in construction.	\$	200,000.00	\$	377,358.49	N/A	N/A	No
228	23365	R-028;L-109_1 REPL 0.53MI MP 7.04-7.57 PH1 Spread 5	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)	\$	98,000.00	\$	184,905.66	8	15.1	No
229	23365	R-028;L-109_1 REPL 0.53MI MP 7.04-7.57 PH1 Spread 5	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.		N/A		N/A	6	11.3	No
230	23365	R-028;L-109_1 REPL 0.53MI MP 7.04-7.57 PH1 Spread 5	Ctr Cst	Low Estimate	Specific cost assumptions in the Job Estimate prove to be inaccurate.	\$	500,000.00	\$	943,396.23	N/A	N/A	No
231	26001	R-024;L-103 REPL 0.65MI MP 16.61-19.60 PH1	Ctr Cst	Weather Impacts	Potential construction delays and resulting additional costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.		Unknown		N/A	6	9.2	No
232	26001	R-024;L-103 REPL 0.65MI MP 16.61-19.60 PH1	Ctr Cst	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$	20,000.00	\$	30,769.23	6	9.2	No
233	26001	R-024;L-103 REPL 0.65MI MP 16.61-19.60 PH1	Ctr Cst	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$	15,000.00	\$	23,076.92	2	3.1	No
234	26001	R-024;L-103 REPL 0.65MI MP 16.61-19.60 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)	1	N/A		N/A	18	27.7	No
235	26001	R-024;L-103 REPL 0.65MI MP 16.61-19.60 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	10,000.00	\$	15,384.62	10	15.4	No
236	26001	R-024;L-103 REPL 0.65MI MP 16.61-19.60 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)		N/A		N/A	12	18.5	No
237	25722	R-021;L-109_2A REPL 0.41MI MP 11.52-11.93 PH1	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.	\$	300,000.00	\$	731,707.32	45	109.8	No
238	25722	R-021;L-109_2A REPL 0.41MI MP 11.52-11.93 PH1	Ctr Cst	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$	30,000.00	\$	73,170.73	N/A	N/A	No
239	25722	R-021;L-109_2A REPL 0.41MI MP 11.52-11.93 PH1	Ctr Cst	Dewatering	A high water table is encountered resulting in unplanned dewatering costs and delays in construction.	\$	65,000.00	\$	158,536.59	N/A	N/A	No

>10% ariance	Comments
No	Unanticipated permit restraints on time such as night work and short hours.
No	Pipe testing indicated contaminants requiring future pipe cleaning and waste management. Amount reflects estimate of cost to reopen holes and clean.
No	Strength test costs assumed to match original PSEP filing estimates proved to be insufficient
No	A 30 day wait was required to complete the project with a hydrotest project that was behind due to permitting delays.
No	Dewatering of a 6 foot deep water table was required when the original drawings did not anticipate water issues.
No	Bike paths/lane closures were issues because they were unplanned and changed by the city.
No	
No	Strength test costs assumed to match original PSEP filing estimates proved to be insufficient
No	No data as yet identified.
No	The drawings incorrectly identified TAP location.
No	CA Tiger Salamanders present. Additional costs for weather report, additional inspection and mitigation of salamanders.
No	There were permitting hurdles at the start for encroachment.
No	Cost paid for changes in drawings and engineering costs.
No	Temporary Construction Easement (TCE) failed to be actualized.
No	Construction resources misunderstood that the entire road would be shut down at once instead of in 3 sections. Negotiations were made with the city to close the whole road at once, but the construction work was significantly impacted.
No	
No	

Line #	New PSRS	Project Description	Region	Risk	Description	Co	st Impact (\$)	Cos	: Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10 Varia
240	25722	R-021;L-109_2A REPL 0.41MI MP 11.52-11.93 PH1	Ctr Cst	Mercury Cleaning - Pipe Replacement	Cleaning Hg from piping associated with asset retirement.	\$	200,000.00	\$	487,804.88	N/A	N/A	No
241	26026	R-049;L-109_4D REPL 0.67MI MP 32.41-33.08 PH1	Ctr Cst	Weather Impacts	Potential construction delays and resulting additional costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.	\$	30,000.00	\$	44,776.12	N/A	N/A	No
242	26026	R-049;L-109_4D REPL 0.67MI MP 32.41-33.08 PH1	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.	\$	50,000.00	\$	74,626.87	14	20.9	No
243	26026	R-049;L-109_4D REPL 0.67MI MP 32.41-33.08 PH1	Ctr Cst	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$	150,000.00	\$	223,880.60	N/A	N/A	No
244	26026	R-049;L-109_4D REPL 0.67MI MP 32.41-33.08 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)	\$	300,000.00	\$	447,761.19	N/A	N/A	No
245	26026	R-049;L-109_4D REPL 0.67MI MP 32.41-33.08 PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.		N/A		N/A	N/A	N/A	No
246	26026	R-049;L-109_4D REPL 0.67MI MP 32.41-33.08 PH1	Ctr Cst	Mercury Cleaning - Pipe Replacement	Cleaning Hg from piping associated with asset retirement.	\$	200,000.00	\$	298,507.46	N/A	N/A	No
247	26024	R-047;L-109_4B REPL 0.47MI MP 28.21-28.6 PH1	Ctr Cst	Weather Impacts	Potential construction delays and resulting additional costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.	\$	40,000.00	\$	85,106.38	N/A	N/A	No
248	26024	R-047;L-109_4B REPL 0.47MI MP 28.21-28.6 PH1	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity, caused by multiple issues, resulting in contractor moving to another construction location on-site.	\$	15,000.00	\$	31,914.89	10	21.3	No
249	26024	R-047;L-109_4B REPL 0.47MI MP 28.21-28.6 PH1	Ctr Cst	Contaminated Soil	Contaminated soil found on a site during excavation. Potential costs associated with contaminated soil handling, storage, hauling and disposal.	\$	15,000.00	\$	31,914.89	N/A	N/A	No
250	26024	R-047;L-109_4B REPL 0.47MI MP 28.21-28.6 PH1	Ctr Cst	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$	3,000.00	\$	6,382.98	N/A	N/A	No
251	26024	R-047;L-109_4B REPL 0.47MI MP 28.21-28.6 PH1	Ctr Cst	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$	35,000.00	\$	74,468.09	N/A	N/A	No
252	26024	R-047;L-109_4B REPL 0.47MI MP 28.21-28.6 PH1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.)	\$	30,000.00	\$	63,829.79	12	25.5	No
253	26024	R-047;L-109_4B REPL 0.47MI MP 28.21-28.6 PH1	Ctr Cst	Mercury Cleaning - Pipe Replacement	Cleaning Hg from piping associated with asset retirement.		Unknown		N/A	N/A	N/A	No
254	23614	V-025;Valve Auto - Alum Rock, 2V, PH. 1	Ctr Cst	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$	2,000.00	\$	1,000.00	N/A	N/A	No
255	23614	V-025;Valve Auto - Alum Rock, 2V, PH. 1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	5,000.00	\$	2,500.00	N/A	N/A	No
256	23614	V-025;Valve Auto - Alum Rock, 2V, PH. 1	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A		N/A	2	1.0	No

>10% ariance	Comments
No	Pipe testing indicated contaminants requiring future pipe cleaning and waste management. Amount reflects estimate of cost to reopen holes and clean.
No	Dewatering was required due to rain and run-off into the trench.
No	Delayed start of construction because a tree cutter was in the vicinity and had slow progress.
No	Red-Legged Frog habitat so additional measures were taken to avoid contact.
No	Delays acquiring SFPUC permit.
No	Design changes were required after IFB.
No	Pipe testing indicated contaminants requiring future pipe cleaning and waste management. Amount reflects estimate of cost to reopen holes and clean.
No	Dewatering was required due to rain and run-off into the trench. Water was contaminated due to substances present in the soil so treatment was required.
No	A power pole was in the way causing construction delays to avoid it.
No	Additional hazardous waste management activities: Serpentine Rocks from the excavation had to be off hauled because they contained ≥1% asbestos (natural occurring).
No	An unmarked water line was encountered.
No	When construction started the wetland size turned out to be an additional 50 feet longer than anticipated so the bore had to be extended.
No	Delay resulting from time required to acquire necessary permits.
No	Pipe will require cleaning prior to retirement.
No	Nesting birds were in the area so there was monitoring and exclusion fencing in place.
No	Equipment was stolen during the night so security was increased to 24/7 for 2 days.
No	A valve was damaged while construction resources were backing up a piece of equipment so it had to be repaired.

Line #	New PSRS	Project Description	Region	Risk	Description	Co	st Impact (\$)	Cost	Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10' Variai
257	23605	V-018;Valve Auto - Lawrence & Lakehaven, 1V, PH. 1	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A		N/A	15	N/A	No
258	23605	V-018;Valve Auto - Lawrence & Lakehaven, 1V, PH. 1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	30,000.00	\$	30,000.00	N/A	N/A	No
259	23605	V-018;Valve Auto - Lawrence & Lakehaven, 1V, PH. 1	Ctr Cst	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be	\$	11,000.00	\$	11,000.00	N/A	N/A	No
260	23615	V-026;Valve Auto - 7A & 7B Pls, 5V, PH. 1	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	\$	13,000.00	\$	2,600.00	2	0.4	No
261	23971	V-029;Valve Auto - Anzar Tap Station, 2V, PH. 1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	5,000.00	\$	2,500.00	1	0.5	Yes
262	23611	V-023;Valve Auto - Hwy 101 & Scheller, 1V, PH. 1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	10,000.00	\$	10,000.00	60	60.0	Yes
263	23611	V-023;Valve Auto - Hwy 101 & Scheller, 1V, PH. 1	Ctr Cst	Surveying and Potholing	Delays or cost increases resulting from surveying, potholing, or mark and locate not being completed prior to IFC.	\$	29,000.00	\$	29,000.00	3	3.0	Yes
264	23611	V-023;Valve Auto - Hwy 101 & Scheller, 1V, PH.1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	30,000.00	\$	30,000.00	9	9.0	Yes
265	23609	V-022;Valve Auto - Diana, 2V, PH. 1	Ctr Cst	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	100,000.00	\$	50,000.00	12	6.0	Yes
266	23439	V-004;Valve Auto - Larkspur Dr., PH. 1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	350,000.00	\$	116,666.67	40	13.3	Yes
267	23439	V-004;Valve Auto - Larkspur Dr., PH. 1	Ctr Cst	Surveying and Potholing	Delays or cost increases resulting from surveying, potholing, or mark and locate not being completed prior to IFC.	\$	150,000.00	\$	50,000.00	12	4.0	Yes
268	23439	V-004;Valve Auto - Larkspur Dr., PH. 1	Ctr Cst	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$	300,000.00	\$	100,000.00	N/A	N/A	Yes
269	23598	V-011;Valve Auto - Birch & S. Delaware, 1 V, PH. 1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	20,000.00	\$	20,000.00	7	7.0	No
270	23598	V-011;Valve Auto - Birch & S. Delaware, 1 V, PH. 1	Ctr Cst	Surveying and Potholing	Delays or cost increases resulting from surveying, potholing, or mark and locate not being completed prior to IFC.	\$	100,000.00	\$	100,000.00	7	7.0	No
271	23598	V-011;Valve Auto - Birch & S. Delaware, 1 V, PH. 1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	50,000.00	\$	50,000.00	N/A	N/A	No
272	23594	V-009;Valve Auto - Van Buren & Ringwood, 1V, PH. 1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	20,000.00	\$	20,000.00	N/A	N/A	No

>10% /ariance	Comments
No	When the 1st of 2 clearances was delayed waiting on a Strength Test to complete (T-025B-11), the 2nd clearance was also delayed. This caused further delay coordinating with a customer's limited time frame for outages. Construction resources worked overtime to meet the rescheduled clearance date.
No	Additional sniff holes and a temporary regulator station were required to support clearance.
No	The existing 'as-built' drawings proved to be inaccurate so last minute changes to the design were necessary.
No	A pipeline blow-down clearance operation had to take place at the Pressure Limiting Station (nearby residents) resulting in additional stand-by time and costs while this was done.
Yes	The hot work permit took additional time to acquire. To avoid this issue in the future, inspectors who are always present on site will issue these permits.
Yes	Did not receive the easement from the local water district in a timely fashion – additional de-mob and re-mob to work around that area was required in an attempt to limit the delay.
Yes	A biological survey was not done prior to IFC so there was stand-by time while surveying was completed and some sensitive plants were cleared. An orange protection fence was placed around some plants.
Yes	An employee access platform was built to provide better access to the valve extension and actuator. Existing valve yard is in a low lying area subject to surface water after rains.
Yes	The excavation was extended to 3 times its original size because the valve and piping were not where the construction drawings showed they would be. Several change orders were received relating to this issue.
Yes	Construction resources had to de-mob and re-mob because the clearance was delayed while waiting for an extended hydrotest project clearance to be completed.
Yes	The SFPUC required additional monitors and environmental surveys to be performed.
Yes	Construction resources did not properly back-fill site after construction, soil settlement occurred, site conditions worsened due to heavy rains. The excavation had to be dug up and back- filled properly. Warranty claim against the contractor.
No	The RTU (controls) cabinet was designed over another utility (water) - relocation of this line was required. The PG&E electric service line in support of this project was installed too close to the water line.
No	During excavation other utilities were encountered resulting in a re- design of the valve vault.
No	Commitment to the city to complete the project and re-open the road proved unrealistic, which resulted in the need to accelerate the project and reconfigure the workspace in an attempt to meet the original commitment.
No	Failed to identify the need to re-coat the pipe located inside the vault before IFB.

Line #	New PSRS	Project Description	Region	Risk	Description	Cost	t Impact (\$)	Cost Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10 Variar
273	23594	V-009;Valve Auto - Van Buren & Ringwood, 1V, PH. 1	Ctr Cst	Field Conditions Differ From Expected Conditions	As-built drawings and/or GIS were believed to be accurate according to records, but did not match what was actually encountered in the field.	\$	100,000.00	\$ 100,000.00	12	12.0	No
274	23594	V-009;Valve Auto - Van Buren & Ringwood, 1V, PH. 1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	70,000.00	\$ 70,000.00	5	5.0	No
275	23594	V-009;Valve Auto - Van Buren & Ringwood, 1V, PH. 1	Ctr Cst	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	\$	25,000.00	\$ 25,000.00	24	24.0	No
276	24286	V-036;Valve Auto - "C" Street Station, PH. 1	Bay	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A	N/A	12	4.0	No
277	24286	V-036;Valve Auto - "C" Street Station, PH. 1	Вау	Weather Impacts	Potential construction delays and resulting additional costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.	\$	10,000.00	\$ 3,333.33	4	1.3	No
278	24012	I-002;L-300B MP 351.8-390.9 UPGRADE PH 1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A	N/A	24	0.6	No
279	24012	I-002;L-300B MP 351.8-390.9 UPGRADE PH 1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A	N/A	12	0.3	No
280	24012	I-002;L-300B MP 351.8-390.9 UPGRADE PH 1	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A	N/A	24	0.6	No
281	24021	I-004;L-300A MP 352.3-391.2 UPGRADE PH 1 CROSSOVER	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A	N/A	48	126.3	No
282	24021	I-004;L-300A MP 352.3-391.2 UPGRADE PH 1 CROSSOVER	Ctr Vly	Productivity Impacts	Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.		N/A	N/A	N/A	N/A	No
283	24021	I-004;Valve Auto - Mabury, PH. 1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.		N/A	N/A	24	63.2	No
284	23618	V-027;Valve Auto - Mabury, PH. 1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$	60,000.00	N/A	N/A	N/A	Yes
285	23618	V-027;Valve Auto - Mabury, PH. 1	Ctr Cst	Low Estimate	Specific cost assumptions in the Job Estimate prove to be inaccurate.	\$	15,000.00	N/A	N/A	N/A	Yes
286	23289	R-026;L-109_1 REPL 0.31MI MP 5.03-5.34 PH1 Spread 2 & 3	Ctr Cst	Dewatering	A high water table is encountered resulting in unplanned dewatering costs and delays in construction.	\$	70,000.00	\$ 225,806.00	6	19.4	Yes

>10% /ariance	Comments
No	A retired PG&E gas line was encountered that was not on as-built drawings.
No	The concrete vault was designed too tall to allow construction resources to appropriately restore the road. Required the lid to be removed, sawed down the wall height and replaced the lid to fix the issue.
No	Delayed commission due to competing priorities with electric service planning resources. Unable to design and install new electric service drop in time to meet project schedule.
No	Scheduling conflict with a nearby strength test project and ICDA (Internal Corrosion Direct Assessment).
No	Delays due to rain.
No	CNG resources were not available when needed to support the clearance. Clearance date had to be delayed.
No	Farmer sprayed a pesticide in the adjoining field requiring stand- down to ensure it was safe to work in the area.
No	Restricted availability of GC resources to complete excavation.
No	CNG resources were not available when needed to support the clearance. Clearance date had to be delayed.
No	Restricted availability of GC resources to complete excavation.
No	The installation of a grounding grid that was necessary for the valve automation was added to the scope of the project after IFB.
Yes	The installation of a grounding grid that was necessary for the valve automation was added to the scope of the project after IFB.
Yes	The project was under estimated because not all site specific design details were available at the time of the estimate. The estimate model for 2013 projects is being adjusted to better account for the variations that can occur between different valve automation projects.
Yes	Dewatering was required on this project and was not included in the cost estimate because the need for it was not identified until construction began. It is now known that L-109 projects in general will require at least some dewatering.

Line #	New PSRS	Project Description	Region	Risk	Description	Cost Impact (\$)	Cost Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10% Variance	Comments
287	23289	R-026;L-109_1 REPL 0.31MI MP 5.03-5.34 PH1 Spread 2 & 3	Ctr Cst	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$ 700,000.00	\$ 2,258,065.00	N/A	N/A	Yes	Surveying and potholing was not sufficient and work took place in a city street where encountering other utilities is likely. A sewer line was encountered and caused damage requiring 1000 feet to be replaced. A portion of the project had to be re-designed so the portion completed in 2011 was tied-in and the site restored. Work was then resumed in Spring of 2012 after the re-design and restored again when this work was completed.
288	23289	R-026;L-109_1 REPL 0.31MI MP 5.03-5.34 PH1 Spread 2 & 3	Ctr Cst	Clearance	Tight clearance windows may result in contractor working additional hours to meet the window for tie- in.	\$ 100,000.00	\$ 322,581.00	N/A	N/A	Yes	Large non-core customer could not take an outage during the designated clearance window and CNG/LNG requirements could not be met to compensate. There were other contributing factors to why the project was stopped in 2011 and resumed in Spring of 2012 5 months later: 1 month as a result of Unknown Obstructions and 4 months as a result of this realized risk.
289	23289	R-026;L-109_1 REPL 0.31MI MP 5.03-5.34 PH1 Spread 2 & 3	Ctr Cst	Low Estimate	Specific cost assumptions in the Job Estimate prove to be inaccurate.	\$ 366,000.00	\$ 11,080,645.00	N/A	N/A	Yes	Historically, L-109 project estimates have been lower than the final actual costs because these projects do not fit the typical project plan due to their locations and associated risks. Also, due to the complications on this project and the stopping and resuming of work, the contractor was on site approximately double what was estimated.
290	23807	R-041;DFM-1020-01 REPL 2.69MI MP 0.00- 2.69 PH1 8" Dist.	North	Weather Impacts	Potential construction delays and resulting additional costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.	N/A	N/A	N/A	N/A	Yes	Poor weather caused delays to the project and required increased man- hours, including overtime, from the GC crew to finish the project.
291	23807	R-041;DFM-1020-01 REPL 2.69MI MP 0.00- 2.69 PH1 8" Dist.	North	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	N/A	N/A	N/A	N/A	Yes	In a portion of the project where a new regulator station was being installed, approximately 800 feet of very hard sand stone was encountered which required hand digging. This also contributed to increased labor costs as more man-hours were required for this slower digging method.
292	27843	R-075;DFM-1607-01 RIM-204 REPL 0.63MI MP 0.00-0.63 PH1	Ctr Vly	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	N/A	N/A	N/A	12.0	Yes	Met with the City of Stockton several times, but it was never identified that a permit was needed with the Central Valley Flood Protection Board to do a portion of the project. The County notified the project team of the need for this permit during the finalization of encroachment plans. The permit has since been obtained as it will be required for 2013 work, but it could not be obtained quickly enough to avoid significant delays. To mitigate the impact the project length was reduced. Re-engineering took approximately two weeks, at which time the GC crew worked at the other end of the project to avoid further delays. In addition to the cost to re-engineer, some of the design changes resulted in construction costs that were higher than previously planned, in particular from the need to 'hot tap' which required a tapping truck.

Line #	New PSRS	Project Description	Region	Risk	Description	Cost Impact (\$)	Cost Impact (\$/mi)	Schedule Impact (days)	Schedule Impact (days/mi)	>10% Variance	Comments
293	26045	R-018;L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	Bay	Weather Impacts	Potential construction delays and resulting additional costs due to rain days. Potential rain interaction with species (e.g. CTS breading migration) delaying construction and increasing cost.	N/A	N/A	N/A	2.0	Yes	Two days of delay occurred as a result of rain.
294	26045	R-018;L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	Вау		Potential impacts to contractor productivity caused by multiple issues which may result in contractor moving to another construction location on-site or other methods of mitigation.	pending email from Doreen	N/A	N/A	N/A	Yes	A higher rate of productivity was assumed when planning than was achievable as a result of limited work space and other conditions. This resulted in additional construction management and inspection costs for the additional duration.
295	26045	R-018;L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	Вау	Unknown Obstructions During Excavation	Potential interference with unmarked and unknown obstructions found during the construction excavation or incorrect drawings potentially delaying construction and resulting in additional cost.	\$ 150,000.00	N/A	N/A	N/A	Yes	Obstructions were encountered during excavation which resulted in additional work around costs.
296	26045	R-018;L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	Вау	Environmental/Species Impacts	Potential delays in construction due to the presence of protected or endangered species at the construction site.	\$ 100,000.00	N/A	N/A	N/A	Yes	More monitoring than was expected was required for burrowing owls that could be present near the construction site resulting in additional costs.
297	26045	R-018;L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	Вау	Permitting	Unplanned permitting conditions, requirements and delays from various permitting agencies (e.g. limited working hours, limited access, delays in issuance, etc.).	\$ 120,000.00	N/A	N/A	N/A	Yes	Additional city inspection fees related to permits were incurred as a result of the extended schedule.
298	26045	R-018;L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	Вау	Mercury Cleaning - Pipe Replacement	Cleaning Hg from piping associated with asset retirement.	\$ 200,000.00	N/A	N/A	N/A	Yes	Mercury was identified as being present in the line so cleaning was required.
299	26045	R-018;L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	Вау	Low Estimate	Specific cost assumptions in the Job Estimate prove to be inaccurate.	N/A	N/A	N/A	N/A	Yes	The Job Estimated (JE) was created prior to this project split into three portions for constructability reasons and was then allocated to each project based on mileage. However, this method of allocation did not take into account the two additional mobilization/de-mobilization costs, site restoration costs and other site specific conditions that may vary along the line resulting in a lower JE than would have otherwise been created. For the other two projects from the split that are planned for 2013, new JEs will be created.
300	26045	R-018;L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	Bay	Unstable/Weak Soil	Unstable soils may require additional shoring which may cause delays to obtain and install.	\$3,500,000 claim - pending evaluation/nego tiation	N/A	N/A	N/A	Yes	A tardy claim has been submitted two months post tie-in claiming that soil conditions were different than anticipated. A claim team is being assembled to evaluate and negotiate this claim.
301	23441	VALVE AUTO - RENGSTORFF, PH1	Ctr Cst	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 1,100,000.00	N/A	30	N/A	Yes	After further site examination, engineering determined that station piping was too congested for a simple in-place valve replacement and a station re-build was necessary instead.
302	26045	R-018;L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	Вау	Changes After IFB	Any changes to the project that were excluded from or occurred after IFB.	\$ 450,000.00	N/A	N/A	N/A	Yes	Because tie-in was delayed until winter, LNG was required to guarantee uninterrupted service to customers and site restoration (\$50,000) was required at the LNG site.

1 23816 24816 4020 L 4022 KeyL L0min (PF 52-24:35 PH) 103 1040 103.0				KEPU	RTING PERIOD	' APRIL 1, 2011 – IVIAI	КСП 31, 2013						
2 2382 26029 R 0001-111A REP ARIAN MPTR/0-2754 PH1 8.83 L 111A 15.708 27.54 Freeno Yes L 2.5.5pH 28-Feb-13 3 23797 23797 2012 L105 1 REPL 2004L MPTA 46-655 PH1 2.00 L1654.1 4.46 6.55 Bette No 5.5pH 22-Sep 12 4 23688 27772 R 013 L20 A REPL 0.5MM MPTA 45-65.5PH1 0.51 L210A 10.69 20.22 Fairfield Yes 3.5PH1 25-Aug-12 5 21346 2774 PO12 L131 Z REPL 0.2MM MPTA 45-65.5PH1 1.71 L114.2 0.813 0.844 0.849 Yes 3.25-UH1 25-Aug-12 6 23688 27772 27772 PAD2 L132 X REPL 0.2MM MPTA 53.02.69.11 1.71 L161A 15.51 1.641 Monthery Conv No 3 0.50-UH1 7 23772 23772 RO21 L102 PLA SED1 MPTA 153.11.83 PH1 0.41 L105 1.631 5560 Monthery Conv No 3 0.50-UH1 9 23725	Line #		New PSRS	6 Project Description		Line	MP1	MP2	City	НСА	Class Code	Clearance Date	Tie-in date
3 23797 23797 23797 16.01 1.00 3.50H 22.500 1 4 2368 27577 8.013 1.230A 16.63 1.210A 16.68 20.22 Failfield Yes 3.59H 30.50g-12 5 23766 33766 A.037 L1207 J REPL 0.266 (LW # 515 8.44 P)L 0.29 L131 2 0.513 0644 Oatley Yes 3.59H 20.50g-12 6 23688 26645 HOBE L14 2 REPL 1.26H (LW # 515 8.44 P)L 0.29 L131 2 0.513 0644 Oatley Yes 3 12.3hm 13 7 23772 23777 Red0 E124 M # D1 3.2 (185 1PHE 1.72 L144 2 9.03 1.52 Oatley Yes 3 0.60-C:12 8 23724 25727 8.011 (M # D.41 H # D1 157 1193 PHE 0.611 L102 L03 1.541 1.560 Monterry CHy 4 3 0.60-C:12 9 23726 23001 R-07 L108 (PE 1.13 M HP 1.157 1193 PHE 0.615 L03 1.610 M	1	23816	23816	R-004 L-142S REPL 1.04mi MP 5.32-6.35 PH1	1.04	L-142S	05.32	60.35	Bakersfield	Yes	3	29-Sep-12	29-Sep-12
4 23698 27572 R-03 L 210A REPL 0 G1MI MP 19.68-20.22 PH1 0.61 L-210A 19.89 20.22 Fairfield Yes 5,5-UT 30-Aug-12 5 23746 23746 R-02 FL332_2 REPL 0.29MI MP 8.15-8.44 PH1 0.79 L131_2 08.45 D8.44 Oakley Yes 5,3-9-UT 27-Auge-12 6 23688 2605 R-02 EL114_2 REPL 172MI MP 9.03-10.52 PH1 1.72 L114_2 9.03 L0.52 Oakley Yes 3 05-00+12 7 23774 23772 R-02 EL136_REPL 172mi MP 15.31 L651 PM1 0.41 L-102_2A 11.52 11.33 Palo Arto Yes 3 06-00+12 9 23728 26001 R-02 EL109 REPL 127 MI MP 3.44-45 Spread 1 1.12 L109 3.41 4.45 Summyole Yes 3 05-0c+12 10 23355 23364 R-02 EL109 REPL 1.27 MI MP 3.44-45 Spread 7 3.11 4.012 1.13 L109 5.66 1.960 Morterrey Cmy Yes 3 01-00+12 11	2	23832	26029	R-006 L-111A REPL 8.83MI MP 18.70-27.54 PH1	8.83	L-111A	18.708	27.54	Fresno	Yes	1,2,3,Split	28-Feb-13	28-Feb-13
5 3/46 1/14 8.0171-131_2 REPL 0 29MI MP 8.15-8.4 (PH 1 0.79 1-131_2 08.15 08.42 Oxdery Yes 3 12.4m-13 6 22588 26045 R-018 L114_2 REPL 1.72MI MP 9.03-10.52 PH 1 1.72 L114_2 9.03 10.52 Oalley Yes 3 12.4m-13 7 27722 2.3772 R-020 L-181A REPL 1.72mi MP 10.51-16.81 PH 1 0.41 L-029_2A 11.52 11.03 Palo Arco Yes 3 0.6-0r+12 9 2.3774 25722 R-021 L-109_2A REPL 0.41mi MP 11.52 L1.93 PH 1 0.41 L-109_2A 11.52 11.03 Palo Arco Yes 3 0.6-0r+12 9 2.3724 25228 R-021 L109 REPL 1.32 MI MP 3.01-4.45 Spread 1 1.12 L-109 3.41 4.45 Summyole Yes 3 0.5-0r-12 11 23865 2238 R-027 L109 REPL 1.12 MI MP 3.01-4.65 Spread 4 1.13 L-09 5.60 6.72 Summyole Yes 3 10.14/1-12 12 23764 <t< td=""><td>3</td><td>23797</td><td>23797</td><td>R-012 L-167-1 REPL 2.09MI MP 4.45-6.55 PH1</td><td>2.09</td><td>L-167-1</td><td>4.46</td><td>6.55</td><td>Butte</td><td>No</td><td>3,Split</td><td>22-Sep-12</td><td>22-Sep-12</td></t<>	3	23797	23797	R-012 L-167-1 REPL 2.09MI MP 4.45-6.55 PH1	2.09	L-167-1	4.46	6.55	Butte	No	3,Split	22-Sep-12	22-Sep-12
6 23688 26045 8-018 L114_2 REPL172MI MP 9.03-10.52 PH1 1.72 L114_2 9.03 10.52 Qakley Yes 3 12-lan-13 7 23772 23772 8-020 L161A REPL172MI MP 3.51-16.63 LPH1 1.73 L181A 15.51 16.61 Monterer Cnty Yes 2.3 13-May 12 8 23724 23772 R-021 L100_2 A REPL 0.41mi MP 15.31-16.61 13.60 Monterer Cnty Yes 3 06-Oct-12 9 23865 23364 R-021 L100_2 A REPL 0.51Mi MP 3.63-138.00 PH1 0.65 1-103 3.61 13.60 Monterer Cnty Yes 1.3 1-60c+12 10 23865 23284 R-021 L109 REPL 0.51Mi MP 3.63-54 Spread 1 1.12 L-109 3.41 4.45 Summycale Yes 3 0150c+12 11 23865 23285 R-028 L109 REPL 0.31Mi MP 5.00-6.77 Spread 4 1.13 L109 5.01 5.72 Summycale Yes 3 0150c+12 14 23704 26019 R-028 L109 REPL 0.31Mi MP 7.01-3.81 PH1	4	23698	27572	R-013 L-210A REPL 0.61MI MP 19.69-20.22 PH1	0.61	L-210A	19.69	20.22	Fairfield	Yes	3,SPLIT	30-Aug-12	30-Aug-12
7 23772 23772 R 020 L JSLA REFL 1 Zmi MP 15.31 I&BI PH1 1.73 L-181A 15.31 16.81 Montrery Cny Yeis 2.3 15-May-12 8 23724 25722 R-021 L 109 2A REFL 0.41mi MP 15.51 1.93 PH1 0.41 L 109 2A 11.52 11.93 Pairo Alco Yeis 3 06-Oct-12 9 23724 25724 R-021 L 108 PEL 1045MI MP 15.61 19.60 PH1 0.65 L 109 3.41 4.45 Summyvale Yeis 3 0.5 Dec. 12 10 23365 23264 R-025 L 108 REPL 0.31MI MP 5.03-5 34 Sumad 283 0.31 L 109 5.03 5.34 Samta Clara Yeis 3 0.5 Dec. 12 12 23365 23295 R-027 L 109 REPL 1.1 MI MP 5.03-5 34 Sumad 283 0.53 L 109 5.00 6.72 Summyvale Yeis 3 19-lun-12 13 23365 2365 R-027 L 109 REPL 1.01 MI MP 10-118.61 PH1 1.61 L 109_3A 17.01 18.61 Stanford/Weio Park Yeis 3 19-lun-12 14	5	23746	23746	R-017 L-131_2 REPL 0.29MI MP 8.15-8.44 PH1	0.29	L-131_2	08.15	08.44	Oakley	Yes	1,3,SPLIT	22-Aug-12	22-Aug-12
8 23724 25722 R-021 L-109_2A REPL 0.41mi MP 11.52-11.93 PH1 0.41 L-109_2A 11.52 11.93 Palo Alto Yes 3 06-Oct-12 9 23728 26001 R-024 L-103 REPL 0.65MI MP 16.61-19.60 PH1 0.65 L-103 3.6.61 19.60 Monteewy Cnty Yes 3 06-Oct-12 10 23365 23364 R-025 L-109 REPL 1.12 MI MP 3.41-4.45 Spread 1 1.12 L-109 3.41 4.45 Summyvale Yes 3 05-Dec-12 11 23365 23286 R-025 L-109 REPL 1.32 MI MP 5.03-5.34 Spread 28.3 0.31 L-109 5.03 5.34 Samta Clara Yes 3 25-Oct-12 12 23365 23365 R-072 L-109 REPL 0.53MI MP 7.04-7.57 Spread 5 0.53 L-109_4 7.04 7.57 Samta Clara Yes 3 08-Dec-12 14 23704 26019 R-030 L-100_3 AREPL 0.53MI MP 7.04-7.57 Spread 5 0.53 L-109_4 7.01 18.61 Stanford/Melo Park Yes 3 08-Dec-12 15 </td <td>6</td> <td>23688</td> <td>26045</td> <td>R-018 L-114_2 REPL 1.72MI MP 9.03-10.52 PH1</td> <td>1.72</td> <td>L-114_2</td> <td>9.03</td> <td>10.52</td> <td>Oakley</td> <td>Yes</td> <td>3</td> <td>12-Jan-13</td> <td>12-Jan-13</td>	6	23688	26045	R-018 L-114_2 REPL 1.72MI MP 9.03-10.52 PH1	1.72	L-114_2	9.03	10.52	Oakley	Yes	3	12-Jan-13	12-Jan-13
8 23724 25722 R-021 L-109_2A REPL 0.41mi MP 11.52-11.93 PH1 0.41 L-109_2A 11.52 11.93 Palo Alto Yes 3 06-Oct-12 3 23728 26001 R-024 L-103 REPL 0.65MI MP 16.61-19.60 PH1 0.65 L-103 16.61 19.60 Mantzeev Cnty Yes 1.3 16-Oct-12 10 23365 23364 R-025 L-109 REPL 1.12 MI MP 3.41-4.45 Spread 1 1.12 L-109 3.41 4.45 Sumnyvale Yes 3 05-Dec-12 11 23365 23286 R-025 L-109 REPL 1.1 MI MP 5.03-5.34 Spread 2.83 0.91 L-109 5.03 5.34 Santa Clara Yes 3 11-Apr 12 12 23365 23295 R-072 L-109 REPL 1.1 MI MP 5.60-6.72 Spread 4 1.13 L-109 5.60 6.72 Sumnyvale Yes 3 19-Jun 12 14 23704 26019 R-030 L-103 .34 REPL 0.51mi MP 7.01-7.57 Spread 5 0.53 L-109_48 28.21 26.6 Santa Clara Yes 3 06-Dec-12 15	7	23772	23772	R-020 L-181A REPL 1.73mi MP 15.31-16.81 PH1	1.73	L-181A	15.31	16.81	Monterey Cnty	Yes	2,3	15-May-12	18-May-12
9 23728 26001 R.024 L 103 REPL 0.65MI MP 16.61 19.60 PH1 0.65 L-03 16.61 19.60 Monterey Cnty Yes 1,3 16-Oct-12 10 23365 23364 R.025 L 109 REPL 1.12 MI MP 3.41-4.45 Spread 1 1.12 L-109 3.41 4.45 Sunnyvale Yes 3 05-Dec-12 11 23365 23269 R-026 L 109 REPL 0.31MI MP 5.03-5.34 Spread 2&3 0.31 L 109 5.60 6.72 Sunnyvale Yes 3 25-Oct-12 12 23365 23265 R-027 L 109 REPL 1.51 MI MP 7.04-7.57 Spread 4 1.13 L 109 7.64 7.57 Santa Clara Yes 3 25-Oct-12 13 2305 2307 23007 R-041 DFM 1020 01 REPL 2.69 MI MP 7.04-7.57 Spread 5 0.53 L 1093A 17.01 18.61 Stanford/Melo Park Yes 3,5plit 16-Dec-12 14 23704 25019 R-041 DFM 1020 01 REPL 2.69 MI MP 7.04-7.57 Spread 5 0.53 L 10948 28.21 28.6 Santo Clara Yes 3,5plit 16-De	8	23724	25722	R-021 L-109_2A REPL 0.41mi MP 11.52-11.93 PH1									06-Oct-12
10 23365 23364 R-025 L-109 REPL 1.12 MI MP 3.41-4.45 Spread 1 1.12 L-109 3.41 4.45 Sunnyvale Yes 3 05-Dec-12 11 23365 23289 R-026 L-109 REPL 0.31 MI MP 5.03-5.34 Spread 2&3 0.31 L-109 5.03 5.34 Santa Clara Yes 3 1.1-Apr-12. 12 23365 23255 R-027 L-109 REPL 1.1 MI MP 5.00-6.72 Spread 4 1.13 L-109 5.60 6.72 Sunnyvale Yes 3 25-Oct-1.2 13 23365 R-021 L-109 JA REPL 1.61 mi MP 7.04-7.57 Spread 5 0.53 L-109 7.04 7.57 Santa Clara Yes 3 3.5Plit 16-Dec-12 14 23704 26019 R-030 L-109 JA REPL 0.67 MI MP 7.04-7.57 Spread 5 0.59 DFM-1020-01 0.000 2.66 Butte No 2.3.SPlit 16-Dec-12 15 23807 R-047 L-109 JA REPL 0.67 MI MP 2.02-2.68 PH 18" Dist. 2.69 DFM-1020-01 0.000 2.66 Santa Clara Yes 3 0.8-Dec-12 16			26001	R-024 L-103 REPL 0.65MI MP 16.61-19.60 PH1							1,3		09-Nov-12
12 23365 23295 R-027 L-109 REPL 1.1 MI MP 5.60-6.72 Spread 4 1.13 L-109 5.60 6.72 Sunnyvale Yes 3 25-Oct-12 13 23365 23365 R-028 L-109 REPL 0.53MI MP 7.04-7.57 Spread 5 0.53 L-109 7.04 7.57 Santa Clara Yes 3 19-Jun-12 14 23704 26019 R-030 L-109 JA REPL 1.61mi MP 17.01-18.61 PH1 1.61 L-109_JA 17.01 18.61 Stantord/Melo Park Yes 3, Split 16-Dec-12 15 23807 23007 R-041 DFM-1020-01 REPL 2.69mi MP 0.00-2.69 PH 18" Dist. 2.69 DFM-1020-01 00.00 2.69 Butte No 2,3,SPLT 14-Jan-13 16 23692 26024 R-047 L-109_4B REPL 0.47 MI MP 28.21-28.6 PH1 0.47 L-109_4B 28.21 28.6 Santa Clara Yes 3 08-Dec-12 17 23692 26026 R-049 L-0.67 MI MP 28.21-28.6 PH1 0.67 L-109_4D 32.41 33.08 Santa Clara Yes 3 08-Dec-12	10	23365	23364	R-025 L-109 REPL 1.12 MI MP 3.41-4.45 Spread 1			3.41	4.45					05-Dec-12
13 23365 R-028 L-109 REPL 0.53MI MP 7.04-7.57 Spread 5 0.53 L-109 7.04 7.57 Santa Clara Yes 3 19-Jun-12 14 23704 26019 R-030 L-109_3A REPL 1.61mi MP 17.01-18.61 PH1 1.61 L-109_3A 17.01 18.61 Stanford/Melo Park Yes 3, Split 16-Dec-12 15 23807 23807 R.041 DFM-1020-01 REPL 2.69mi MP 0.00-2.69 PH 8" Dist. 2.69 DFM-1020-01 00.00 2.69 Butte No 2.3, Split 14-Jan-13 16 23692 26024 R-047 L-109_4B REPL 0.67MI MP 28.21-28.6 PH1 0.47 L-109_4B 28.21 28.6 Santa Clara Yes 3 08-Dec-12 17 23692 26026 R-049 L-109_4D REPL 0.67MI MP 32.41-33.08 PH1 0.67 L-109_4D 32.41 33.08 Santa Clara Yes 3 08-Dec-12 18 23728 27529 R-07 L-103 REPL 0.43MI MP 20.02-20.54 PH1 0.43 L-103 20.02 20.54 Monterey Cnty No 3 30-Aug-12 19 23862 23862 R-071 DFM-1502-08 REPL 0.52MI MP 0.01-0.52 PH1 0.52	11	23365	23289	R-026 L-109 REPL 0.31MI MP 5.03-5.34 Spread 2&3	0.31	L-109	5.03	5.34	Santa Clara	Yes	3	11-Apr-12	11-Apr-12
14 23704 26019 R-030 L-109_3A REPL1.61mi MP 17.01-18.61 PH1 1.61 L-109_3A 17.01 18.61 Stanford/Meto Park Yes 3,5plit 16-Dec-12 15 23807 23807 R-041 DFM-1020-01 REPL 2.69mi MP 0.00-2.69 PH1 8" Dist. 2.69 DFM-1020-01 00.00 2.69 Butte No 2.3,5PLIT 14-Jan-13 16 23692 26024 R-047 L-109_4B REPL 0.47 MI MP 2.82.1-28.6 PH1 0.47 L-109_4B 28.21 28.6 Santa Clara Yes 3 08-Dec-12 17 23692 26026 R-049 L-109_4D REPL 0.67 MI MP 2.82.1-28.6 PH1 0.67 L-109_4D 32.41 33.08 Santa Clara Yes 3 08-Dec-12 18 23728 27529 R-070 L-103 REPL 0.43 MI MP 2.02-20.54 PH1 0.43 L-103 20.02 20.54 Monterey Cnty No 3 30-Aug-12 19 23862 R-071 DFM-1502-08 REPL 0.52 MI MP 0.01-0.52 PH1 0.52 DFM-1502-08 0.01 0.52 Yuba No 2.Split 21-Dec-12	12	23365	23295	R-027 L-109 REPL 1.1 MI MP 5.60-6.72 Spread 4	1.13	L-109	5.60	6.72	Sunnyvale	Yes	3	25-Oct-12	25-Oct-12
15 23807 23807 R-041 DFM-1020-01 REPL 2.69mi MP 0.00-2.69 PH18" Dist. 2.69 DFM-1020-01 00.00 2.69 Butte No 2,3,SPLIT 14-Jan-13 16 23692 26024 R-047 L-109_4B REPL 0.47 MI MP 28.21-28.6 PH1 0.47 L-109_4B 28.21 28.6 Santa Clara Yes 3 08-Dec-12 17 23692 26026 R-049 L-109_4D REPL 0.67MI MP 32.41-33.08 PH1 0.67 L-109_4D 32.41 33.08 Santa Clara Yes 3 08-Dec-12 18 23728 27529 R-070 L-103 REPL 0.43 MI MP 2.02-20.54 PH1 0.43 L-103 20.02 20.54 Monterey Cnty No 3 30-Aug-12 19 23862 23852 R-071 DFM-1502-08 REPL 0.52MI MP 0.01-0.52 PH1 0.52 DFM-1503-01 0.52 Yuba No 2,5plit 21-Dec-12 20 23875 23875 R-072 DFM-1503-01 DEACTIVATE 0.93MI MP 0.00.92 PH1 0.92 DFM-1503-01 0.00 0.92 Yuba Yes 3,N/A,SPLIT 19-Oct-12 21 23698 27521 R-073 L-210A REPL 0.20MI MP 25.41-25.62 PH1 0.21 <	13	23365	23365	R-028 L-109 REPL 0.53MI MP 7.04-7.57 Spread 5	0.53	L-109	7.04	7.57	Santa Clara	Yes	3	19-Jun-12	19-Jun-12
16 23692 26024 R-047 L-109_4B REPL 0.47 MI MP 28.21-28.6 PH1 0.47 L-109_4B 28.21 28.6 Santa Clara Yes 3 08-Dec-12 17 23692 26026 R-049 L-109_4D REPL 0.67 MI MP 32.41-33.08 PH1 0.67 L-109_4D 32.41 33.08 Santa Clara Yes 3 08-Dec-12 18 23728 27529 R-070 L-103 REPL 0.43 MI MP 20.02-20.54 PH1 0.43 L-103 20.02 20.54 Monterey Cnty No 3 30-Aug-12 19 23862 23862 R-071 DFM-1502-08 REPL 0.52 MI MP 0.01-0.52 PH1 0.52 DFM-1502-08 0.01 0.52 Yuba No 2,5plit 21-Dec-12 20 23875 R-072 DFM-1503-01 DEACTIVATE 0.93 MI MP 0.00.92 PH1 0.92 DFM-1503-01 0.00 0.92 Yuba Yes 3,N/A,SPLIT 19-Oct-12 21 23698 27521 R-073 L-210A REPL 0.20 MI MP 25.41-25.62 PH1 0.21 L-210A 25.41 25.62 Napa Yes 1 26-Nov-12 22 N/A 27758 R-074 L-164 REPL Coalinga Cross Over 0.39mi 0.39 L-164 <	14	23704	26019	R-030 L-109_3A REPL 1.61mi MP 17.01-18.61 PH1	1.61	L-109_3A	17.01	18.61	Stanford/Melo Park	Yes	3,Split	16-Dec-12	16-Dec-12
17 23692 26026 R-049 L-109_4D REPL 0.67MI MP 32.41-33.08 PH1 0.67 L-109_4D 32.41 33.08 Santa Clara Yes 3 08-Dec-12 18 23728 27529 R-070 L-103 REPL 0.43MI MP 20.02-20.54 PH1 0.43 L-103 20.02 20.54 Monterey Cnty No 3 30-Aug-12 19 23862 23862 R-071 DFM-1502-08 REPL 0.52MI MP 0.01-0.52 PH1 0.52 DFM-1502-08 0.01 0.52 Yuba No 2,Split 21-Dec-12 20 23875 23875 R-072 DFM-1503-01 DEACTIVATE 0.93MI MP 0.00-92 PH1 0.92 DFM-1503-01 0.00 0.92 Yuba Yes 3,N/A,SPLIT 19-Oct-12 21 23698 27521 R-073 L-210A REPL 0.20MI MP 25.41-25.62 PH1 0.21 L-210A 25.41 25.62 Napa Yes 1 26-Nov-12 22 N/A 27758 R-074 L-164 REPL Coalinga Cross Over 0.39mi 0.39 L-164 00.00 0.41 Coalinga No 1 31-Aug-12 23 24890 27843 R-075 DFM-1607-01 RIM 204 REPL 0.63 MI MP 0.00-0.63 PH1 0.51 <td< td=""><td>15</td><td>23807</td><td>23807</td><td>R-041 DFM-1020-01 REPL 2.69mi MP 0.00-2.69 PH1 8" Dist.</td><td>2.69</td><td>DFM-1020-01</td><td>00.00</td><td>2.69</td><td>Butte</td><td>No</td><td>2,3,SPLIT</td><td>14-Jan-13</td><td>14-Jan-13</td></td<>	15	23807	23807	R-041 DFM-1020-01 REPL 2.69mi MP 0.00-2.69 PH1 8" Dist.	2.69	DFM-1020-01	00.00	2.69	Butte	No	2,3,SPLIT	14-Jan-13	14-Jan-13
18 23728 27529 R-070 L-103 REPL 0.43MI MP 20.02-20.54 PH1 0.43 L-103 20.02 20.54 Monterey Cnty No 3 30-Aug-12 19 23862 23862 R-071 DFM-1502-08 REPL 0.52MI MP 0.01-0.52 PH1 0.52 DFM-1502-08 0.01 0.52 Yuba No 2,5plit 21-Dec-12 20 23875 23875 R-072 DFM-1503-01 DEACTIVATE 0.93MI MP 0.00-92 PH1 0.92 DFM-1503-01 0.00 0.92 Yuba Yes 3,N/A,SPLIT 19-Oct-12 21 23698 27521 R-073 L-210A REPL 0.20MI MP 25.41-25.62 PH1 0.21 L-210A 25.41 25.62 Napa Yes 1 26-Nov-12 22 N/A 27758 R-074 L-164 REPL Coalinga Cross Over 0.39mi 0.39 L-164 00.00 0.41 Coalinga No 1 31-Aug-12 23 24890 27843 R-075 DFM-1607-01 RIM 204 REPL 0.63MI MP 0.00-0.63 PH1 0.51 DFM-1607-01 00.00 0.63 Stockton Yes 3 05-Nov-12	16	23692	26024	R-047 L-109_4B REPL 0.47 MI MP 28.21-28.6 PH1	0.47	L-109_4B	28.21	28.6	Santa Clara	Yes	3	08-Dec-12	08-Dec-12
19 23862 23862 R-071 DFM-1502-08 REPL 0.52MI MP 0.01-0.52 PH1 0.52 DFM-1502-08 0.01 0.52 Yuba No 2,Split 21-Dec-12 20 23875 23875 R-072 DFM-1503-01 DEACTIVATE 0.93MI MP 0.00.92 PH1 0.92 DFM-1503-01 0.00 0.92 Yuba Yes 3,N/A,SPLIT 19-Oct-12 21 23698 27521 R-073 L-210A REPL 0.20MI MP 25.41-25.62 PH1 0.21 L-210A 25.41 25.62 Napa Yes 1 26-Nov-12 22 N/A 27758 R-074 L-164 REPL Coalinga Cross Over 0.39mi 0.39 L-164 00.00 0.41 Coalinga No 1 31-Aug-12 23 24890 27843 R-075 DFM-1607-01 RIM 204 REPL 0.63MI MP 0.00-0.63 PH1 0.51 DFM-1607-01 00.00 0.63 Stockton Yes 3 05-Nov-12	17	23692	26026	R-049 L-109_4D REPL 0.67MI MP 32.41-33.08 PH1	0.67	L-109_4D	32.41	33.08	Santa Clara	Yes	3	08-Dec-12	08-Dec-12
20 23875 23875 R-072 DFM-1503-01 DEACTIVATE 0.93MI MP 0.00.92 PH1 0.92 DFM-1503-01 0.00 0.92 Yuba Yes 3,N/A,SPLIT 19-Oct-12 21 23698 27521 R-073 L-210A REPL 0.20MI MP 25.41-25.62 PH1 0.21 L-210A 25.41 25.62 Napa Yes 1 26-Nov-12 22 N/A 2758 R-074 L-164 REPL Coalinga Cross Over 0.39mi 0.39 L-164 00.00 0.41 Coalinga No 1 31-Aug-12 23 24890 27843 R-075 DFM-1607-01 RIM 204 REPL 0.63MI MP 0.00-0.63 PH1 0.51 DFM-1607-01 00.00 0.63 Stockton Yes 3 05-Nov-12	18	23728	27529	R-070 L-103 REPL 0.43MI MP 20.02-20.54 PH1	0.43	L-103	20.02	20.54	Monterey Cnty	No	3	30-Aug-12	30-Aug-12
21 23698 27521 R-073 L-210A REPL 0.20MI MP 25.41-25.62 PH1 0.21 L-210A 25.41 25.62 Napa Yes 1 26-Nov-12 22 N/A 27758 R-074 L-164 REPL Coalinga Cross Over 0.39mi 0.39 L-164 00.00 0.41 Coalinga No 1 31-Aug-12 23 24890 27843 R-075 DFM-1607-01 RIM 204 REPL 0.63MI MP 0.00-0.63 PH1 0.51 DFM-1607-01 00.00 0.63 Stockton Yes 3 05-Nov-12	19	23862	23862	R-071 DFM-1502-08 REPL 0.52MI MP 0.01-0.52 PH1	0.52	DFM-1502-08	0.01	0.52	Yuba	No	2,Split	21-Dec-12	03-Jan-13
22 N/A 27758 R-074 L-164 REPL Coalinga Cross Over 0.39mi 0.39 L-164 00.00 0.41 Coalinga No 1 31-Aug-12 23 24890 27843 R-075 DFM-1607-01 RIM 204 REPL 0.63MI MP 0.00-0.63 PH1 0.51 DFM-1607-01 00.00 0.63 Stockton Yes 3 05-Nov-12	20	23875	23875	R-072 DFM-1503-01 DEACTIVATE 0.93MI MP 0.00.92 PH1	0.92	DFM-1503-01	0.00	0.92	Yuba	Yes	3,N/A,SPLIT	19-Oct-12	19-Oct-12
23 24890 27843 R-075 DFM-1607-01 RIM 204 REPL 0.63MI MP 0.00-0.63 PH1 0.51 DFM-1607-01 00.00 0.63 Stockton Yes 3 05-Nov-12	21	23698	27521	R-073 L-210A REPL 0.20MI MP 25.41-25.62 PH1	0.21	L-210A	25.41	25.62	Napa	Yes	1 	26-Nov-12	27-Nov-12
	22	N/A	27758	R-074 L-164 REPL Coalinga Cross Over 0.39mi	0.39	L-164	00.00	0.41	Coalinga	No	1	31-Aug-12	31-Aug-12
24 23701 23701 R-076 DFM-7225-02 RIM 205 REPL Down Rate 2.42MI MP 0.00-2.42 PH1 2.42 DFM-7225-02 00.00 2.42 Ceres Yes 3,SPLIT 07-Dec-12	23	24890	27843	R-075 DFM-1607-01 RIM 204 REPL 0.63MI MP 0.00-0.63 PH1	0.51	DFM-1607-01	00.00	0.63	Stockton	Yes	3	05-Nov-12	05-Nov-12
	24	23701	23701	R-076 DFM-7225-02 RIM 205 REPL Down Rate 2.42MI MP 0.00-2.42 PH1	2.42	DFM-7225-02	00.00	2.42	Ceres	Yes	3,SPLIT	07-Dec-12	08-Dec-12

Line #	PSEP Filing PSRS	New PSRS	Project Description	Miles Completed	Line	MP1	MP2	City	НСА	Class Code	Clearance Date	Tie-in date
1	23505	26265	T-013B-12, Line L-109, Daly City	1.75	L-109	41.9	43.473	Daly City	Yes	3	08-Nov-12	08-Nov-12
2	23557	25850	T-018-12, Line L-132, San Francisco	1.80	L-132	48.44	49.98	San Francisco	Yes	0,3	11-Jul-12	11-Jul-12
3	23511	25857	T-021-12, Line L-191-1, Pittsburg	0.36	L-191-1	9.5862	9.94	Pittsburg	No	3	30-Mar-12	30-Mar-12
4	23496	25863	T-025-12, Line L-100, San Jose	5.23	L-100	138.43	143.853	San Jose	Yes	3	07-Jun-12	07-Jun-12
5	24537	27746	T-025B-11, Line L-132, Santa Clara	0.63	L-132	4.29	4.92	Santa Clara	Yes	3	27-Aug-12	27-Aug-12
6	23496	25865	T-026-12, Line L-100, San Jose	4.28	L-100	143.853	147.77	San Jose	Yes	3	07-Jun-12	07-Jun-12
7	23496	25868	T-027-12, Line L-100, Milpitas	2.36	L-100	147.77	150.13	Milpitas	Yes	3	07-Jun-12	07-Jun-12
8	24537	24530	T-038-11, Line L-132, San Francisco	1.95	L-132	46.61	48.44	San Francisco	Yes	3	12-Jun-12	12-Jun-12
9	N/A	28473	T-038B-11, Line L-132, Daly City	0.00	L-132	46.6059	46.608	Daly City	Yes	3	23-Feb-13	25-Feb-13
10	24537	24531	T-039B-11, Line L-132, San Francisco	1.63	L-132	49.98	51.5	San Francisco	Yes	3	11-Jul-12	11-Jul-12
11	23467	25893	T-040-12, Line DFM-7221-10, Salida/Modesto	2.46	DFM-7221-10	7.208	9.652	Salida/Modesto	Yes	3	29-Apr-12	29-Apr-12
12	23510	25899	T-044-12, Line L-138, Fresno	6.11	L-138	22.55	28.64	Fresno	No	1	03-Aug-12	03-Aug-12
13	23510	25901	T-045-12, Line L-138, Fresno	7.25	L-138	28.64	35.91	Fresno	No	1,2	03-Aug-12	03-Aug-12
14	23510	25810	T-047-12, Line L-138, Fresno	0.16	L-138	45.39	45.56	Fresno	No	3	19-Sep-12	19-Sep-12
15	23582	26476	T-047C-11, Line L-153, Oakland	2.80	L-153	20.06	22.87	Oakland	Yes	3	19-Oct-12	19-Oct-12
16	23493	25812	T-048-12, Line L-142N, Bakersfield	3.14	L-142N	0	3.159	Bakersfield	No	2,3	04-May-12	04-May-12
17	23493	25816	T-049-12, Line L-142N, Bakersfield	3.53	L-142N	3.159	6.6854	Bakersfield	Yes	3	04-May-12	04-May-12
18	23495	25821	T-052-12, Line L-142S, Bakersfield	0.66	L-142S	0.02	0.69	Bakersfield	Yes	3	13-Jul-12	13-Jul-12
19	23495	25822	T-053-12, Line L-142S, Bakersfield	0.68	L-142S	3.21	3.87	Bakersfield	Yes	3	13-Jul-12	13-Jul-12
20	23495	25824	T-054-12, Line L-142S, Bakersfield	1.04	L-142S	10.445	11.48	Bakersfield	Yes	3	25-Jul-12	25-Jul-12

	PSEP Filing			Miles							Clearance	
Line #	PSRS	New PSRS	Project Description	Completed	Line	MP1	MP2	City	HCA	Class Code	Date	Tie-in date
21	23497	25826	T-055-12, Line L-300A, Tehachapi	0.81	L-300A	230.32	231.2	Tehachapi	No	2	07-Sep-12	07-Sep-12
22	24495	24499	T-057E-11, Line L-300A, San Bernardino	0.92	L-300A	181.446	182.3365	San Bernardino	Yes	1,3	22-Mar-12	22-Mar-12
23	23497	26783	T-057W-11, Line L-300A, Kern	0.58	L-300A	187.849	188.408	Kern	Yes	1	22-Mar-12	22-Mar-12
24	23497	25830	T-059-12, Line L-300A, Bakersfield	0.23	L-300A	277.89	278.12	Bakersfield	Yes	3	28-Jul-12	28-Jul-12
25	23497	25394	T-061-12, Line L-300A, Coalinga	2.12	L-300A	372.499	374.572	Coalinga	Yes	1	30-Jan-12	30-Jan-12
26	23535	25849	T-073-12, Line L-021F, San Rafael	0.99	L-021F	19.17	20.09	San Rafael	Yes	3	22-May-12	22-May-12
27	23552	25858	T-079-12, Line L-119A, Davis	3.90	L-119A	0.0035	3.824	Davis	Yes	1,3	07-Sep-12	07-Sep-12
28	23525	25877	T-089-12, Line L-210B, Fairfield	3.25	L-210B	7.4976	10.8217	Fairfield	Yes	1,3	05-Oct-12	05-Oct-12
29	23525	25879	T-090-12, Line L-210B, Fairfield	5.10	L-210B	10.8217	15.6107	Fairfield	Yes	1,3	05-Oct-12	05-Oct-12
30	23525	25881	T-091-12, Line L-210B, Fairfield	4.95	L-210B	15.6107	20.222	Fairfield	Yes	3	24-Oct-12	24-Oct-12
31	23525	25883	T-092-12, Line L-210B, Napa	2.94	L-210B	22.98	25.98	Napa	No	1	15-Oct-12	15-Oct-12
32	23929	25890	T-096-12, Line DFM-1816-01, Santa Cruz	1.99	DFM-1816-01	16.3	18.25	Santa Cruz	No	0,3	27-Jul-12	27-Jul-12
33	23513	25892	T-097-12, Line L-148, Modesto	6.06	L-148	0	6.06	Modesto	No	1,2	03-Apr-12	03-Apr-12
34	23513	25898	T-099-12, Line L-148, Modesto	6.52	L-148	6.06	12.58	Modesto	No	1,2	24-Apr-12	24-Apr-12
35	24204	24204	T-10 L-105C MP 0 to MP 1.76	1.74	L-105©	0	1.76	Oakland	Yes	3	19-Aug-11	31-Aug-11
36	23513	25900	T-100-12, Line L-148, Modesto	2.00	L-148	12.58	14.62	Modesto	No	2,3	19-May-12	19-May-12
37	23905	25904	T-101-12, Line DFM-3010-01, Antioch	0.61	DFM-3010-01	0.64	1.27	Antioch	Yes	3	01-Feb-13	04-Feb-13
38	23548	25908	T-102D-12, Line L-118A, Chowchilla	0.32	L-118A	37.38	37.71	Chowchilla	No	2	19-Jun-12	19-Jun-12
39	23548	25913	T-102F-12, Line L-118A, Merced	0.53	L-118A	58.21	58.74	Merced	Yes	3	10-Jul-12	10-Jul-12
40	24537	25917	T-104-12, Line L-132, San Carlos	3.57	L-132	25.6	29.06	San Carlos	No	1,2,3	27-Sep-12	27-Sep-12

Line #	PSEP Filing PSRS	New PSRS	6 Project Description	Miles Completed	Line	MP1	MP2	City	НСА	Class Code	Clearance Date	Tie-in date
41	23513	26090	T-109 E/W L-148 MP 0 to MP 17.63	3.10	L-148	14.51	17.63	Modesto	Yes	3	28-Oct-11	03-Nov-11
42	24560	24206	T-11 L-105N MP 11.07 to MP 11.86	0.83	L-105N	11.07	11.86	Newark	Yes	3	31-May-11	12-Jun-11
43	23497	25926	T-110-12, Line L-300A, Hollister	3.23	L-300A	446.4777	449.706	Hollister	No	1,2	31-Aug-12	31-Aug-12
44	24555	24555	T-112 L-191 MP 9.44 to MP 10.57	1.12	L-191	9.4767	10.59	Pittsburg	Yes	3	04-Nov-11	15-Nov-11
45	23497	26088	T-116A L-300A MP 267.935 to MP 269.833	0.84	L-300A	268.1191	268.9522	Bakersfield	No	2	09-Nov-11	21-Nov-11
46	23497	26088	T-116B L-300A MP 267.935 to MP 269.833	0.20	L-300A	269.5336	269.7181	Bakersfield	No	2	09-Nov-11	21-Nov-11
47	N/A	25340	T-117 L-300B MP 283.50 to MP 284.56	0.80	L-300B	283.855	284.65	Bakersfield	No	1,2	16-Oct-11	31-Oct-11
48	23557	26104	T-12017 L-132 MP 40.04 TO MP 40.08	0.05	L-132	40.0458	40.0837	San Bruno	Yes	3	17-Nov-11	22-Nov-11
49	23497	25393	T-12056 T-118A/B L-300A MP 239.57 to MP 244.03	4.11	L-300A	239.57	243.74	Tehachapi	Yes	1,2	09-Nov-11	21-Nov-11
50	23497	25395	T12062 L-300A MP 384.398 to MP 385.456	0.44	L-300A	384.6511	385.088	N. Kettleman	Yes	1	14-Nov-11	19-Nov-11
51	N/A	25770	T-121 L-303 MP 26.555 to MP 27.672	1.29	L-303	26.15	27.46	Livermore	Yes	1,3	10-Nov-11	19-Nov-11
52	23566	25459	T-122 DFM 0211-01 MP 0.0 to MP 0.74	0.68	L-0211-01	0	0.68	Burlingame	Yes	3	27-Oct-11	29-Oct-11
53	24521	25928	T-122-12, Line L-300B, Topock	0.03	L-300B	0.1294	0.1549	Topock	Yes	1	28-Mar-12	28-Mar-12
54	24560	24558	T-15 L-105N MP 26.2 to MP 28.13	0.20	L-105N	288.98	291.3083	San Leandro	Yes	3	04-Sep-11	16-Sep-11
55	24560	24559	T-16 L-105N MP 28.13 to MP 28.64	0.51	L-105N	28.13	28.64	Oakland	Yes	3	16-Sep-11	30-Sep-11
56	24560	24560	T-17 L-105N MP 28.64 to MP 30.63	2.02	L-105N	28.64	30.63	Oakland	Yes	3	07-Oct-11	25-Oct-11
57	23694	25467	T-172-12, Line L-131, Livermore	0.14	L-131	35.73	35.89	Livermore	Yes	3	12-Aug-12	12-Aug-12
58	23695	27568	T-173-12, Line DFM-7219-01, Modesto	3.69	DFM-7219-01	0.0025	3.73	Modesto	No	2	31-Aug-12	31-Aug-12
59	N/A	27772	T-176-12, Line L-301F, Marina	0.77	L-301F	7.114	7.933	Marina	Yes	3	25-Aug-12	25-Aug-12
60	23724	28279	T-182-12, Line L-109, Milpitas	0.65	L-109	0.44	1.16	Milpitas	Yes	3	26-Oct-12	26-Oct-12

Line #	PSEP Filing PSRS	New PSRS	Project Description	Miles Completed	Line	MP1	MP2	City	НСА	Class Code	Clearance Date	Tie-in date
61	24521	28448	T-183-12, Line L-300B, Barstow	0.28	L-300B	152.448	152.6929	Barstow	No	3	14-Dec-12	14-Dec-12
62	24084	24703	T-19 L-114 MP 16.51 to MP 16.5736	0.06	L-114	16.51	16.5736	Brentwood	No	3	07-Sep-11	20-Sep-11
63	23500	23500	T-2 L-101 MP 2.45 to MP 2.65	2.68	L-101	0.36	3	San Jose	Yes	1,3	01-Jun-11	11-Jun-11
64	23554	24702	T-20 L-131 MP 42.35 to MP 42.38	0.08	L-131	42.35	42.42	Sunol	Yes	1	22-Jul-11	30-Jul-11
65	23554	24486	T-22N L-131 MP 50.57 to MP 51.42	0.90	L-131	50.57	51.42	Fremont	Yes	3	03-Oct-11	21-Oct-11
66	23554	24486	T-22S L-131 MP 51.42 to MP 55.88	4.38	L-131	51.4207	55.88	Fremont	Yes	3	03-Oct-11	21-Oct-11
67	24699	24699	T-23 L-131 MP 57.46 to MP 57.47	0.00	L-131	57.46	57.47	Milpitas	Yes	1,3	25-May-11	25-May-11
68	24537	24545	T-24 L-132 MP 0.7426 to MP 1.87	0.97	L-132	0.946	1.89	Milpitas	Yes	1,3	19-Oct-11	25-Oct-11
69	24537	23508	T-25 L-132 MP 3.05 to MP 4.92	1.00	L-132	3.05	4	Santa Clara	Yes	3	14-Jun-11	22-Jun-11
70	24537	24529	T-26 L-132 MP 4.92 to MP 7.06	2.13	L-132	4.92	7.06	Sunnyvale	Yes	3	05-Oct-11	17-Oct-11
71	24537	24538	T-27 L-132 MP 7.06 to MP 8.54	1.48	L-132	7.06	8.54	Sunnyvale	Yes	3	26-Aug-11	14-Sep-11
72	24537	24535	T-28 L-132 MP 8.54 to MP 10.32	1.85	L-132	8.54	10.32	Mountain View	Yes	3	08-Aug-11	18-Aug-11
73	24537	24533	T-29 L-132 MP 10.32 to MP 13.95	3.68	L-132	10.32	13.95	Mountain View	Yes	3	25-Aug-11	19-Sep-11
74	23500	24526	T-3 L-101 MP 3.39 to MP 3.4775	1.83	L-101	3	5	Santa Clara	Yes	1,3	01-Jun-11	11-Jun-11
75	24537	24534	T-30 L-132 MP 13.95 to MP 18.4621	4.48	L-132	13.95	18.46	Palo Alto	Yes	3	17-Oct-11	18-Nov-11
76	24537	24532	T-31 L-132 MP 18.4621 to MP 21.39	4.81	L-132	18.4621	23	Menlo Park	Yes	3	27-Sep-11	18-Nov-11
77	24537	24537	T-32 L-132 MP 21.39 to MP 24.4708	2.61	L-132	23	25.6	Woodside	Yes	1,2,3	27-Sep-11	18-Nov-11
78	24537	24541	T-33 L-132 MP 29.05 to MP 30.9595	3.09	L-132	29.06	31.93	San Mateo/ Belmont	Yes	3	21-Sep-11	17-Nov-11
79	24537	24539	T-34 L-132 MP 30.9595 to MP 34.49	3.23	L-132	31.93	34.635	San Mateo/ Hillsborough	Yes	3	21-Sep-11	17-Nov-11
80	24537	24543	T-35 L-132 MP 34.49 to MP 38.39	4.04	L-132	34.635	38.39	Burlingame	Yes	3	21-Sep-11	17-Nov-11

Line #	PSEP Filing PSRS	New PSR	S Project Description	Miles Completed	Line	MP1	MP2	City	НСА	Class Code	Clearance Date	Tie-in date
81	24537	24479	T-36A L-132 MP 40.0837 to MP 42.34	2.16	L-132	40.0837	42.13	San Bruno	Yes	3	23-May-11	22-Nov-11
82	24537	24481	T-36B L-132 MP 42.34 to MP 43.6131	1.48	L-132	42.13	43.613	San Bruno	Yes	3	23-May-11	22-Nov-11
83	23480	24655	T-40 L-132A MP 0.0057 to MP 1.4589	1.45	L-132A	0.0057	1.4589	Mountain View	Yes	3	03-May-11	25-May-11
84	23480	24697	T-41 L-132A MP 1.4589 to MP 1.4659	0.01	L-132A	1.4589	1.4659	Mountain View	No	3	03-May-11	25-May-11
85	24548	23512	T-42 L-147 MP 0.17 to MP 1.1321	1.26	L-147	0.01	0.855	San Carlos	No	1,3	29-Sep-11	29-Oct-11
86	24548	24547	T-43A L-147 MP 1.1321 to MP 2.2	0.67	L-147	0.8555	1.48	San Carlos	Yes	3	29-Sep-11	29-Oct-11
87	24548	24548	T-43B L-147 MP 2.2 to MP 3.4	1.92	L-147	1.48	3.4	San Carlos	Yes	3	29-Sep-11	29-Oct-11
88	24554	24553	T-44 L-153 MP 0 to MP 3.58	3.55	L-153	0	3.51	Fremont	Yes	3	18-Jul-11	06-Aug-11
89	24554	23519	T-45 L-153 MP 9.2 to MP 13.62	4.44	L-153	9.2	13.61	Union City	Yes	3	16-Jun-11	11-Jul-11
90	24554	24550	T-46 L-153 MP 13.62 to MP 17.6	4.05	L-153	13.61	17.63	Hayward	Yes	3	16-Jun-11	14-Jul-11
91	24554	24551	T-47A L-153 MP 17.65 to MP 20.07	0.34	L-153	17.65	18.01	San Leandro	Yes	3	19-Jul-11	02-Aug-11
92	24554	24552	T-47B L-153 MP 20.07 to MP 22.87	2.05	L-153	18.03	20.06	San Leandro	Yes	3	25-Oct-11	20-Nov-11
93	24555	23526	T-49 E/W L-191 MP 6.4753 to MP 9.44	3.01	L-191	6.4753	9.47	Pittsburg	Yes	3	04-Nov-11	15-Nov-11
94	24495	23543	T-51 L-300A MP 121.8722 to MP 122.6788	0.81	L-300A	121.8722	122.6788	Newberry-Baker	Yes	1,3	02-Jun-11	12-Jun-11
95	24495	24487	T-52 L-300A MP 127.0327 to MP 127.9306	0.90	L-300A	127.0327	127.93	Newberry Springs	Yes	1	02-Jun-11	12-Jun-11
96	24495	24506	T-54 L-300A MP 151.066 to MP 156.4	1.60	L-300A	154.81	156.4	Barstow	Yes	1,3	16-Sep-11	04-Oct-11
97	24495	24507	T-55 L-300A MP 156.4 to MP 157.86	1.46	L-300A	156.4	157.86	Barstow/Lenwood	Yes	3	16-Sep-11	04-Oct-11
98	24495	24508	T-56 L-300A MP 157.86 to MP 160.1392	1.47	L-300A	157.86	159.33	Barstow	Yes	1,2,3	16-Sep-11	04-Oct-11
99	24495	24502	T-60 L-300A MP 256.22 to MP 257.0763	0.86	L-300A	256.22	257.08	Arvin	Yes	1	05-Aug-11	12-Aug-11
100	24495	24491	T-62 L-300A MP 345.02 to MP 345.2571	0.28	L-300A	345.02	345.2571	Kettleman City	Yes	1	21-Jun-11	30-Jun-11

Line #	PSEP Filing PSRS	Now DCDC	Project Description	Miles Completed	Line	MP1	MP2	City
	Fara	NEW PSR5		completed	Line	IVIFI	WIF Z	Avenal/ Kettleman
101	24495	24490	T-63 L-300A MP 353.56 to MP 353.85	0.32	L-300A	353.56	353.851	City
102	24495	24504	T-64 L-300A MP 414.92 to MP 416.016	1.83	L-300A	414.79	416.62	Paicines
102	24433	24304	1-04 L-300A MIT 414.32 to MIT 410.010	1.85	L-300A	414.75	410.02	Facilies
103	24495	24488	T-65A L-300A MP 450 to MP 450.83	0.82	L-300A	450	450.83	Hollister
104	23497	25926	T-65B L-300A MP 445.705 to MP 446.48	0.83	L-300A	445.59	446.48	Hollister
105	24495	24511	T-67A L-300A MP 472.1279 to MP 478.0014	0.22	L-300A	477.93	478.14	San Martin
106	24495	24511	T-67B L-300A MP 472.1279 to MP 478.0014	0.41	L-300A	475.36	475.76	San Martin
107	24495	24509	T-68 L-300A MP 480.9574 to MP 483.7391	3.05	L-300A	480.7	483.74	Morgan Hill
108	23542	23542	T-7 L-105A MP 38 to MP 41	2.16	L-105A	38	41	Emeryville
109	24495	24496	T-70 L-300A MP 488.7782 to MP 490.59	0.14	L-300A	490.49	490.63	San Jose
110	24495	24497	T-71 L-300A MP 490.59 to MP 493.0078	2.97	L-300A	490.66	493.58	San Jose
111	24495	24494	T-72 L-300A MP 493.58 to MP 495.86	2.54	L-300A	493.58	496.11	San Jose
112	24495	24492	T-73 L-300A MP 496.36 to MP 499.96	3.75	L-300A	496.36	499.96	San Jose
113	24495	24493	T-74 L-300A MP 499.96 to MP 502.23	2.37	L-300A	499.96	502.24	Milpitas
114	24492	23546	T-75 L-300A-1 MP 156.4 to MP 157.0092	1.47	L-300A-1	156.4	157.86	Barstow
115	24521	24516	T-76 L-300B MP 0.1548 to MP 0.459	0.31	L-300B	0.1548	0.459	Barstow/Topock
116	24521	23549	T-77 L-300B MP 126.883 to MP 127.4994	0.60	L-300B	126.883	127.499	Newberry Springs
117	24521	24525	T 704 L 2000 MD 140 22 to MD 160 89	2.40	1.200B	152 7221	155.10	Barrtou
117	24521	24525	T-79A L-300B MP 149.33 to MP 160.88	2.48	L-300B	152.7321	155.19	Barstow
118	24521	24525	T-79B L-300B MP 149.33 to MP 160.88	0.17	L-300B	160.712	160.88	Barstow
119	24521	24519	T-80 L-300B MP 237.4451 to MP 249.8392	3.88	L-300B	237.4451	241.33	Tehachapi
120	24521	24518	T-81 L-300B MP 256.66 to MP 257.5096	0.85	L-300B	256.66	257.51	Arvin

HCA Class Code	Clearance Date	Tie-in date
Yes 1	21-Jun-11	30-Jun-11
Yes 1,3	02-Dec-11	08-Dec-11
Yes 3	17-Sep-11	28-Sep-11
No 1,2	17-Sep-11	28-Sep-11
Yes 1	17-Oct-11	27-Oct-11
Yes 1	17-Oct-11	27-Oct-11
Yes 1	29-0ct-11	09-Nov-11
Yes 3	21-Sep-11	05-Oct-11
Yes 3	20-Jul-11	08-Aug-11
Yes 1,3	16-Sep-11	04-Oct-11
Yes 1	20-Aug-11	30-Aug-11
Yes 1	13-Jun-11	21-Jun-11
Yes 3	07-0ct-11	20-Oct-11
Yes 3	07-Oct-11	20-Oct-11
Yes 2	16-Aug-11	01-Sep-11
Yes 1	16-Aug-11	01-Sep-11

Line #	PSEP Filing	Now DCDC	Desired Description	Miles Completed	Line	MP1	MP2	City	НСА	Class Code	Clearance Date	Tie-in date
Line #	PSRS	New PSRS	Project Description	completed	Line	IVIP1	IVIPZ	City	ΠCA	Class Code	Date	ne-in uate
121	24521	24522	T-82 L-300B MP 263.46 to MP 264.368	0.91	L-300B	263.46	264.39	Bakersfield	Yes	1	16-Aug-11	01-Sep-11
								Kettleman City/				<u>.</u>
122	24521	24513	T-84A L-300B MP 353.5369 to MP 354.3115	0.30	L-300B	353.5369	353.82	Avenal Kettleman City/	Yes	1	18-Jul-11	26-Jul-11
123	24521	24513	T-84B L-300B MP 353.5369 to MP 354.3115	0.29	L-300B	354.018	354.3115	Avenal	Yes	1	18-Jul-11	26-Jul-11
124	24521	24512	T-85 L-300B MP 384.2827 to MP 384.8438	0.56	L-300B	384.2827	384.84	Cantua Creek	Yes	1	22-Jun-11	30-Jun-11
125	24521	24520	T-86 L-300B MP 414.7728 to MP 416.7896	4.29	L-300B	414.7728	419.1049	Paicines	Yes	1,3	09-Dec-11	15-Dec-11
126	24521	26092	T-87A L-300B MP 445.7332 to MP 451.72	0.01	L-300B	450.7828	450.8	Hollister/ Tres Pinos	Yes	3	29-Sep-11	13-Oct-11
127	24521	26092	T-87B L-300B MP 445.7332 to MP 451.72	0.46	L-300B	450.3251	450.78	Hollister/ Tres Pinos	Yes	3	29-Sep-11	13-Oct-11
128	24521	26092	T-87C L-300B MP 445.7332 to MP 451.72	1.07	L-300B	445.7332	446.8	Hollister/ Tres Pinos	Yes	3	29-Sep-11	13-Oct-11
129	24521	24515	T-89N L-300B MP 484.0126 to MP 492.08	1.63	L-300B	489.3301	490.97	San Jose	Yes	1	10-Aug-11	10-Sep-11
130	24521	24515	T-89S L-300B MP 484.0126 to MP 492.08	0.72	L-300B	484.0126	484.7235	San Jose	Yes	1	10-Aug-11	10-Sep-11
131	24897	24701	T-9 L-105A-1 MP 0 to MP 0.004	0.00	L-105A-1	0	0.004	Emeryville/ Oakland	Yes	3	21-Sep-11	21-Sep-11
132	24521	24517	T-90 A/B/C/D L-300B MP 492.08 to MP 502.64	11.85	L-300B	490.97	502.64	San Jose	Yes	3	10-Aug-11	10-Sep-11
133	23551	23551	T-93A L-400-3 MP 295.9127 to MP 299.91	4.47	L-400-3	295.44	299.91	Antioch	Yes	1,2,3	09-Nov-11	21-Nov-11
134	23551	23551	T-93B L-400-3 MP 295.9127 to MP 299.91	4.47	L-400	293.4	297.86	Sherman Island	Yes	1,2,3	25-Oct-11	08-Nov-11
135	24162	25348	T-96A/B SP - 5 MP 0 to MP 2.4	3.87	SP5	0	3.87	Oakley / Antioch	Yes	3	09-May-11	27-May-11
120	NI / A	26222	Test DD 002 12 Line DEM 2405 01 Frement	0.00		0.553	0.63		Vac	C	12 Apr 12	20 Apr 12
136	N/A	26332	Test PR-002-12, Line DFM-2405-01, Fremont	0.09	DFM-2405-01	0.553	0.62	Fremont	Yes	3	13-Apr-12	28-Apr-12
137	23689	26331	Test PR-003-12, Line L-131, Milpitas	0.17	L-131	0	0.1752	Milpitas	Yes	3	28-Mar-12	09-Apr-12
138	23505	25838	TIM-013A-12, Line L-109, Daly City	1.92	L-109	41.9	43.473	Daly City	Yes	3	08-Nov-12	08-Nov-12
139	23582	26478	TIM-019-12, Line L-153, Oakland	2.41	L-153	22.87	25.11	Oakland	Yes	3	19-Oct-12	19-Oct-12
140	23582	26475	TIM-020-12, Line L-153, Oakland	2.66	L-153	25.11	27.88	Oakland	Yes	3	27-Nov-12	27-Nov-12

Line #	PSEP Filing PSRS	New PSRS	Project Description	Miles Completed	Line	MP1	MP2	City	НСА	Class Code	Clearance Date	Tie-in date
141	23861	25862	TIM-024-12, Line DFM-0813-01, San Jose	1.00	DFM-0813-01	0.0293	1.2862	San Jose	Yes	3	05-Nov-12	05-Nov-12
142	24537	24544	TIM-037-11, Line L-132, South San Francisco	3.08	L-132	43.61	46.57	South San Francisco	Yes	0	07-Sep-12	07-Sep-12
143	24183	25897	TIM-042-12, Line L-057A-MD1, McDonald Island	0.61	L-057A-MD1	0.0043	0.616	McDonald Island	Yes	1,3	25-Jan-13	15-Feb-13
144	24183	25896	TIM-043-12, Line L-057A-MD1, McDonald Island	0.16	L-057A-MD1	0.97	1.13	McDonald Island	Yes	1	25-Jan-13	15-Feb-13
145	24484	24484	TIM-101-11, Line DFM-1816-01, Watsonville	5.74	DFM-1816-01	3.441	8.44	Watsonville	Yes	3	31-Aug-12	31-Aug-12
146	23548	25905	TIM-102A-12, Line L-118A, Fresno	0.18	L-118A	0	0.18	Fresno	Yes	3	23-May-12	23-May-12
147	23505	25179	TIM-114-11, Line L-109, Mountain View	1.35	L-109	7.57	8.72	Mountain View	Yes	3	19-Jun-12	19-Jun-12
148	23692	26320	TIM-123-12, Line L-109, Hillsborough	1.90	L-109	30.52	32.4378	Hillsborough	Yes	3	16-Nov-12	16-Nov-12
149	23704	26322	TIM-125-12, Line L-109, Redwood City	0.84	L-109	21.422	22.225	Redwood City	Yes	3	03-Aug-12	03-Aug-12
150	23704	26323	TIM-126-12, Line L-109, Menlo Park	1.29	L-109	18.56	19.55	Menlo Park	Yes	3	03-Aug-12	03-Aug-12
151	23906	26324	TIM-130-12, Line DFM-3017-01, Walnut Creek	3.27	DFM-3017-01	0.8157	3.92	Walnut Creek	Yes	3	10-Aug-12	10-Aug-12
152	23906	26325	TIM-131-12, Line DFM-3017-01, Danville	3.57	DFM-3017-01	3.92	7.54	Danville	Yes	3	10-Aug-12	10-Aug-12
153	N/A	26310	TIM-133-12, Line DFM-7224-01, Modesto	0.67	DFM-7224-01	5.34	6.02	Modesto	Yes	3	11-Aug-12	11-Aug-12
154	N/A	26311	TIM-134A-12, Line L-107, Sunol	7.29	L-107	18.69	26.01	Sunol	Yes	1,3	21-Sep-12	21-Sep-12
155	23847	26326	TIM-136-12, Line DFM-1614-01, Lodi	3.90	DFM-1614-01	0	3.9	Lodi	Yes	3	03-Nov-12	03-Nov-12
156	23728	26327	TIM-140-12, Line L-103, Prunedale	0.40	L-103	15.6417	15.86	Prunedale	Yes	1	16-Oct-12	16-Oct-12
157	23502	26329	TIM-142-12, Line L-103, Salinas	0.10	L-103	27.16	27.26	Salinas	Yes	3	27-Oct-12	27-Oct-12
158	23786	26330	TIM-143-12, Line DFM-0405-01, Napa	4.58	DFM-0405-01	3.87	13	Napa	Yes	3	28-Sep-12	28-Sep-12
159	23786	26337	TIM-144-12, Line DFM-0405-01, Yountville	4.58	DFM-0405-01	3.87	13	Yountville	No	1,3	28-Sep-12	28-Sep-12
160	23556	26338	TIM-146-12, Line DFM-0115-01, Oakland	0.39	DFM-0115-01	0	0.4054	Oakland	Yes	3	27-Nov-12	27-Nov-12

Line #	PSEP Filing PSRS	New PSRS	Project Description	Miles Completed	Line	MP1	MP2	City	НСА	Class Code	Clearance Date	Tie-in date
161	23866	26340	TIM-149-12, Line DFM-0813-02, San Jose	0.51	DFM-0813-02	0	0.5	San Jose	Yes	3	05-Nov-12	05-Nov-12
162	23871	26341	TIM-150-12, Line DFM-0814-05, San Jose	0.29	DFM-0814-05	0	0.31	San Jose	Yes	3	05-Nov-12	05-Nov-12
163	N/A	26317	TIM-155-12, Line L-138D, Fresno	1.54	L-138D	45.1	46.64	Fresno	Yes	3	06-Dec-12	06-Dec-12
164	N/A	26318	TIM-159-12, Line L-181B, Aromas	0.45	L-181B	4.0776	4.5077	Aromas	Yes	2,3	07-Jul-12	07-Jul-12
165	23470	26831	TIM-160B-12, Line DFM-7222-01, Turlock	2.00	DFM-7222-01	11.16	13.15	Turlock	Yes	3	03-Oct-12	03-Oct-12
166	23472	26343	TIM-161-12, Line DFM-7223-01, Modesto	8.24	DFM-7223-01	0.1436	8.3998	Modesto	No	3	19-Aug-12	19-Aug-12
167	23474	23474	TIM-162-12, Line DFM-7224-09, Modesto	1.35	DFM-7224-09	0	1.35	Modesto	Yes	3	19-Dec-12	19-Dec-12
168	23918	26620	TIM-166-12, Line DFM-1301-01, Cotati	0.46	DFM-1301-01	4.18	4.63	Cotati	Yes	3,SPLIT	12-Oct-12	12-Oct-12
169	23697	26622	TIM-168-12, Line DFM-1614-08, Lodi	0.43	DFM-1614-08	0.56	1.0	Lodi	Yes	3	13-Aug-12	13-Aug-12
170	23520	26623	TIM-169-12, Line L-197B, Lodi	4.50	L-197B	0	4.467	Lodi	Yes	2,3	21-Sep-12	21-Sep-12
171	23704	28135	TIM-175-12, Line L-109, Stanford	0.22	L-109	16.93	17.10	Stanford	No	3	25-Oct-12	25-Oct-12
172	N/A	28133	TIM-177-12, Line L-119A, Sacramento	0.33	L-119A	16.12	16.4109	Sacramento	Yes	3	27-Oct-12	27-Oct-12
173	N/A	28253	TIM-179-12, Line L-153_2, Oakland	0.03	L-153_2	0	0.03075	Oakland	Yes	3	27-Nov-12	27-Nov-12
174	N/A	28278	TIM-180-12, Line L-191-1, Martinez	1.11	L-191-1	34.7	35.28	Martinez	Yes	3	15-Nov-12	15-Nov-12
175	23497	25181	W00273&W0274- HYDRO 300A MP 290.33	2.26	L-300A	288.98	291.3083	Bakersfield	No	1,2	01-Oct-11	11-Oct-11

TABLE 25-1 PACIFIC GAS AND ELECTRIC COMPANY COMPLETED VALVE AUTOMATION AND IN-LINE INSPECTION PROJECTS REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

				REPORTING PERIOD APRIL	1. 2011 – MAR	CH 31. 2013						
P	SEP Filing			Miles Completed							Clearance	
Line #	PSRS	New PSRS	Project Description	(I)/Valves Automated (V)	Line	MP1	MP2	City	HCA	Class Code	Date	Tie-in date
1	24021	24021	I-004 L-300A MP 352.3-391.2 UPGRADE PH-1	39	L-300A	352.3	391.2	Fresno	Yes	1,2	08-Jun-12	05-Nov-12
2	24012	24012	I-002 L-300B MP 351.8-390.9 UPGRADE PH-1	39	L-300B	351.8	390.9	Kings	Yes	1,2,3	19-May-12	18-Nov-12
3	24286	24286	V-036 Valve Auto - "C" Street Station, 3V, Ph. 1	3	N/A	N/A	N/A	Martinez	N/A	N/A	06-Nov-12	18-Dec-12
4	23380	23380	V-002 Valve Auto - Healy Station, Ph. 1	2	N/A	N/A	N/A	Corning	N/A	N/A	19-Jul-11	29-Jul-11
5	24287	24287	V-037 Valve Auto - Franklin Canyon, 3V, Ph 1	4	N/A	N/A	N/A	Hercules	N/A	N/A	07-Dec-12	12-Dec-12
6	24284	24284	V-032 Valve Auto - SP3-Line 191 Mtr Sta, 4V, Ph 1	4	N/A	N/A	N/A	Pittsburg	N/A	N/A	22-Feb-13	19-Mar-13
7	23618	23618	V-027 Valve Auto - Mabury, 1V, Ph. 1	1	N/A	N/A	N/A	San Jose	N/A	N/A	N/A	10-May-12
8	23438	23438	V-003 Valve Auto - San Andreas, 2V, Ph. 1	2	N/A	N/A	N/A	San Bruno	N/A	N/A	14-Oct-11	14-Oct-11
9	23613	23613	V-024 Valve Auto - Fontanoso, 3V, Ph. 1	3	N/A	N/A	N/A	San Jose	N/A	N/A	03-May-12	04-May-12
10	23614	23614	V-025 Valve Auto - Alum Rock, 2V, Ph. 1	2	N/A	N/A	N/A	San Jose	N/A	N/A	20-Jun-12	02-Aug-12
11	23615	23615	V-026 Valve Auto - 7A & 7B Pls, 5V, Ph. 1	5	N/A	N/A	N/A	San Jose	N/A	N/A	01-Jun-12	12-Jul-12
12	23611	23611	V-023 Valve Auto - Hwy 101 & Scheller, 1V, Ph. 1	1	N/A	N/A	N/A	San Jose	N/A	N/A	18-Jun-12	24-Oct-12
13	23970	23970	V-028 Valve Auto - Half Moon Bay Tap, 2V, Ph. 1	2	N/A	N/A	N/A	San Mateo	N/A	N/A	12-Feb-13	13-Feb-13
14	23971	23971	V-029 Valve Auto - Anzar Tap Station 2V, Ph. 1	2	N/A	N/A	N/A	San Juan Bautista	N/A	N/A	11-Jul-12	30-Aug-12
15	23609	23609	V-022 Valve Auto - Diana, 2V, Ph. 1	2	N/A	N/A	N/A	Morgan Hill	N/A	N/A	02-Jul-12	02-Jul-12
16	23605	23605	V-018 Valve Auto - Lawrence & Lakehaven, 1V, Ph. 1	1	N/A	N/A	N/A	Sunnyvale	N/A	N/A	26-Sep-12	07-Nov-12
17	23598	23598	V-011 Valve Auto - Birch & S. Delaware, 1V, Ph. 1	1	N/A	N/A	N/A	San Mateo	N/A	N/A	12-Sep-12	05-Dec-12
18	23594	23594	V-009 Valve Auto - Van Buren & Ringwood, 1V, Ph. 1	1	N/A	N/A	N/A	Menlo Park	N/A	N/A	30-Oct-12	05-Dec-12
19	23442	23442	V-007 Valve Auto - Milpitas Terminal, 15V, Ph. 1	15	N/A	N/A	N/A	Milpitas	N/A	N/A	13-Mar-12	16-Mar-12
20	23440	23440	VALVE AUTO - SIERRA VISTA STN, PH. 1	4	N/A	N/A	N/A	Mountain View	N/A	N/A	N/A	21-Oct-11
21	23606	23606	V-019 Valve Auto - Martin Station, 4V, Ph. 1	2	N/A	N/A	N/A	Daly City	N/A	N/A	21-Jan-13	27-Feb-13
22	23379	23379	VALVE AUTO - SF GAS LOAD CENTER, PH. 1	3	N/A	N/A	N/A	San Francisco	N/A	N/A	N/A	11-Nov-11
23	23462	23462	VALVE AUTO - CROSSMAN AVE, PH. 1	1	N/A	N/A	N/A	Sunnyvale	N/A	N/A	23-Jul-11	29-Sep-11
24	23441	23441	VALVE AUTO - RENGSTORFF STN, PH. 1	3	N/A	N/A	N/A	Millbrae	N/A	N/A	21-Jul-11	23-Sep-11
25	23439	23439	V-004 Valve Auto - Larkspur Dr, Ph. 1	3	N/A	N/A	N/A	San Mateo	N/A	N/A	30-Dec-11	17-Feb-12

TABLE 26-1 PACIFIC GAS AND ELECTRIC COMPANY FORECAST PROJECTS NOT COMPLETED OR REPLACED BY HIGHER PRIORITY PROJECTS REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

100000000000000000000000000000000000000						
	рсгр			DCED		
	PSEP Filing			PSEP Filing		
Line #	PSRS	New PSRS	Project Description	Year	Current Status	Comments
1	23710	······································	R-002 DFM-7221-15 REPL 1.60mi MP 0.04-1.64 PH1 (Non-PSEP)	2012	Removed	Removed from PSEP and transferred to Gas Transmission & Storage (GT&S or
2	24210	24210	L-021A_1 TEST 0.09MI MP 24.49-24.58 PH1	2012	Removed	Removed from Phase 1 (PH1) due to records verified.
3	23926	29488	L-172A REPL 0.43MI MP 78.71-79.13 PH1	2012	Removed	Scope removed from Replacement and added as new Strength Test project d
4	23590	25831	DFM-0407-01 TEST 0.18MI MP 0.44-0.59 PH1	2012	Removed	Removed from PH1 due to records verified.
5	23934	23934	DFM-1401-01 TEST 0.80MI MP 0.00-0.79 PH1	2012	Removed	Removed from PH1 due to records verified.
6	23505	25840	Test T-014-12, Line L-109, San Francisco	2012	Removed	Removed from PH1 due to records verified.
7	23688	26048	R-103 L-114_2 REPL 2.18MI MP 10.52-12.70 PH1	2012	Delayed	Delayed from 2012 to 2014 due to additional project definition identifying pe
						Removed from PH1 due to records verified for half of scope. Other half of sco
8	23688	27980	L-114_2 REPL 0.01MI MP 28.96-28.98 PH1	2012	Removed	support construction efficiency.
9	23536	23536	L-303 TEST 1.16MI MP 19.21-20.43 PH1	2012	Removed	Removed from PH1 due to records verified.
10	23529	25880	L-306 TEST 2.12MI MP 41.58-43.7 PH1	2012	Removed	Removed from PH1 due to records verified.
11	24187	25887	DFM-1202-01 TEST 2.13MI MP 0.00-2.13 PH1	2012	Removed	Removed from PH1 due to records verified.
12	23493	25819	Test T-050-12, Line L-142N, Bakersfield	2012	Removed	Removed from PH1 due to records verified.
13	23497	25828	Test T-057-12, Line L-300A_2, Tehachapi	2012	Removed	Removed from PH1 due to records verified.
14	23531	23531	L-401 TEST 0.80MI MP 323.44-26.76 PH1	2012	Removed	Removed from PH1 due to records verified.
15	23881	23881	Test T-064-12, Line L-021A_2, Napa	2012	Removed	Removed from PH1 due to records verified.
						Removed from PH1 due to records verified removal of adjacent segments, the
16	23533	25836	L-021C TEST 0.99MI MP 49.16-50.15 PH1	2012	Removed	phase due to proximity to PH1 work to support cost and construction efficien
17	24208	24208	Test T-067-12, Line L-021D	2012	Removed	Removed from PH1 due to records verified.
18	24207	25839	Test T-068-12, Line L-021E, Ukiah	2012	Removed	Removed from PH1 due to records verified.
19	23843	23843	Test TIM-078-12, DFM-0651-01	2012	Removed	Removed from PH1 due to records verified.
20	23552	25859	Test T-080-12, Line L-119A, Sacramento	2012	Removed	Removed from scope because this portion of line has been taken out of servi
21	23501	25867	Test T-083-12, Line L-172A, Arbuckle	2012	Removed	Removed from PH1 due to records verified.
22	23501	25869	Test T-084-12, Line L-172A, Zamora	2012	Removed	Removed from PH1 due to records verified.
23	23501	25873	Test T-086-12, Line L-172A, Woodland	2012	Removed	Removed from PH1 due to records verified.
24	24264	25875	Test T-088-12, Line L-200A-1, Rio Vista	2012	Removed	Removed from PH1 due to records verified.
25	24897	24701	L-105A-1 TEST 0.00MI MP 0.00-0.00 PH1	2012	Removed	Removed and added to replacement in 2011 to support construction efficient
						Removed from Strength Test with 1 segment added as new Replacement pro
26	24554		L-153_1 TEST Station 0.07MI MP 3.51-3.58 PH1	2011	Removed	validation.
27	23491		Test TIM-103-12, Line L-105N	2012	Added then removed	Removed from PH1 due to records verified.
28	24554	24554	L-153_2 TEST 5.69MI MP 3.59-9.20 PH1	2012	Removed	Removed from PH1 due to records verified.
						Delayed from 2012 to 2014, initially due to schedule and resources load balan
29	24899	24899	R-035 L-105N-5 REPL 0.10mi MP 36.39-36.47 PH1	2012	Delayed	of Oakland Pressure Limiting Station.
30	24521	25912	L-300B_1 TEST 5.52MI MP 155.19-160.712 PH1	2011	Delayed	Delayed from 2011 to 2014 to allow more time for data validation of pipeline
31	24495	25907	L-300A_1 TEST Station 0.02MI MP 490.64-490.66 PH1	2011	Delayed	Delayed from 2011 to 2014 to complete engineering associated with portion
						Delayed from 2011 to 2014 because this section of the line had a previous pr
32	24495	25909	L-300A_1 TEST 5.51MI MP 182.34-187.85 PH1	2011	Delayed	it could be delayed for prioritization reasons.
33	23491	25252	L-105N_2 TEST 0.058MI MP 21.24-21.30 PH1	2012	Removed	Removed from PH1 due to records verified.
34	23491	23491	L-105N_2 TEST MI MP 21.30-21.70 PH1	2012	Removed	Removed from PH1 due to records verified.
35	24521	25918	L-300B_1 TEST Station 0.20MI MP 353.82-354.018 PH1	2011	Delayed	Delayed from 2011 to 2014 to allow more time for engineering because it inv
26	24554	24554		2014		Delayed from 2011 to 2014 as this portion of the line is in a station and requi
36	24554	24554	L-153_1 TEST Station 0.02MI MP 18.01-18.03 PH1	2011	Delayed	station work.
	24524	24521/		2014	Delevie -	Delayed from 2011 to 2014 due to additional project definition identifies
37	24521	25920	L-300B_1 TEST 0.92MI MP 450.80-451.72 PH1	2011	Delayed	Delayed from 2011 to 2014 due to additional project definition identifying ex Removed from PH1 due to records verified.
38 39	23500	24528 24557	L-101 TEST 0.26MI MP 9.76-10.00 PH1	2011	Removed	Removed from PH1 due to records verified. Removed from PH1 due to records verified.
39	24560	24337	L-105N_1 TEST 0.21MI MP 18.92-19.14 PH1	2011	Removed	Inchioved nom Fire due to records verified.

or 'Base') Rate case.

due to site conditions limiting constructability.

permits requiring long lead times. scope combined with Valve Auto project Dalton Crossover to

these segments previously having been accelerated from future ency.

vice.

ency.

roject and the other segment removed from PH1 as a result of data

lancing in 2012, then further delayed due to potential move of Port

ne specification and engineering.

on of line in regulator station.

pressure test that met the standard at the time it was conducted so

involves station piping at Kettleman Compressor Station. Juires complex engineering and coordination with other planned

extended environmental permitting timelines.

TABLE 26-1 PACIFIC GAS AND ELECTRIC COMPANY FORECAST PROJECTS NOT COMPLETED OR REPLACED BY HIGHER PRIORITY PROJECTS REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

	рстр			PSEP		
	PSEP					
Line #	Filing PSRS	New PSRS	Project Description	Filing Year	Current Status	Comments
40	23554	23534	L-131_1 TEST 1.22MI MP 49.36-50.57 PH1	2011	Removed	Removed from PH1 due to records verified.
41	24495	24498	L-300A_1 TEST 0.66MI MP 0.29-0.94 PH1	2011	Removed	Removed from PH1 due to records verified.
42	24495	24505	L-300A_1 TEST 0.79MI MP 150.26-151.06 PH1	2011	Removed	Removed from PH1 due to records verified.
43	24495	24500	L-300A_1 TEST 1.07MI MP 237.44-238.00 PH1	2011	Removed	Removed from PH1 due to records verified.
44	23503	23503	L-177A TEST 0.33MI MP 88.50-88.83 PH1	2012	Removed	Removed from PH1 due to records verified.
45	24495	24501	L-300A_1 TEST 0.56MI MP 198.93-201.22 PH1	2011	Removed	Removed from PH1 due to records verified.
			_			Delayed from 2012 to 2014, initially to accommodate other higher priority te
46	23497	25876	L-300A_2 TEST 3.94MI MP 468.19-472.13 PH1	2012	Delayed	environmental permitting delays.
47	23535	25846	T-071-12, Line L-021F, Novato	2012	Removed	Removed from PH1 due to records verified.
48	23535	25848	T-072-12, Line L-021F, Novato	2012	Removed	Removed from PH1 due to records verified.
						Delayed from 2012 to future phase to determine new location for automatio
49	23608	23608	VALVE AUTO - ROUSSEAU STREET, PH. 1	2012	Removed	in 2015 and will no longer be routed through proposed location.
						Delayed from 2012 to 2013 to accommodate other higher priority tests for Ir
50	23590	25829	DFM-0407-01 TEST 0.44MI MP 0.00-0.44 PH1	2012	Delayed	due to a class location change that lowered the priority of this test.
						Delayed from 2012 to 2014, initially to accommodate other higher priority te
51	23497	25872	L-300A_2 TEST 4.28MI MP 463.91-468.19 PH1	2012	Delayed	environmental permitting delays.
52	24495	24503	L-300A_1 TEST 0.58MI MP 268.95-269.53 PH1	2011	Removed	Removed from PH1 due to records verified.
						Delayed from 2012 to 2014, initially to accommodate other higher priority te
53	23535	25844	L-021F TEST 2.56MI MP 2.7-5.26 PH1	2012	Delayed	2014 due to data validation that identified that the pipe is within a different
						Delayed from 2012 to 2014, initially to coordinate work with other 2013 test
54	23575	23575	DFM-0611-01 TEST 1.07MI MP 0.00-1.07 PH1	2012	Delayed	and to coordinate work with other non-PSEP projects scheduled for 2014.
						Delayed from 2012 to 2014 initially to coordinate work with other 2013 tests
55	23577	27633	DFM-0611-02 TIM TEST 1.50MI MP 0.00-1.91 PH1	2012	Delayed	and to coordinate work with other non-PSEP projects scheduled for 2014.
						Delayed from 2012 to 2014, initially to coordinate work with other 2013 test
56	24196	25856	DFM-0611-05 TEST 0.12MI MP 0.00-0.12 PH1	2012	Delayed	and to coordinate work with other non-PSEP projects scheduled for 2014.
57	24495	24488	L-300A_1 TEST 1.77MI MP 450.83-454.33 PH1	2011	Removed	Removed from PH1 due to records verified.
58	24495	24495	L-300A_1 TEST 0.95MI MP 487.78-488.19 PH1	2011	Removed	Removed from PH1 due to records verified.
			_			Removed because scope transferred to Martin Station Rebuild project. Isolat
59	23607	23607	VALVE AUTO - BAYSHORE & GENEVA, PH. 1	2012	Removed	work already competed at Martin Station, making automation at this location
60	23818	23818	L-101 REPL 0.02MI MP 9.28-9.30	2012	Removed	Removed from PH1 due to records verified.
61	24897	24897	L-105A-1 REPL 0.01MI MP 0.00-0.00 PH1	2012	Removed	Removed from PH1 due to records verified.
62	24041	24041	L-138C REPL 0.01MI MP 43.58-43.59 PH 1	2012	Removed	Removed from PH1 due to records verified.
				2242		Removed from Replacement workstream and added as new Strength Test in
63	24084	24084	L-114_1 REPL 0.06MI MP 16.51-16.57 PH1	2012	Removed	in 2011.
64	23773	23773	L-181B REPL 0.36MI MP 2.17-10.32 PH1	2012	Removed	Removed from PH1 due to records verified.
65	24495	24510	L-300A_1 TEST 2.02MI MP 485.14-487.78 PH1	2011	Removed	Removed from PH1 due to records verified.
66	23795	23795	L-109_5 REPL 0.13MI MP 34.39-45.84 PH1	2012	Removed	Scope partially moved to existing test project (PSRS 26825), remaining scope
67	22750	22750		2012	Demonsional	All but one segment removed from PH1 due to records verification; remaining
67	23758	23758	L-050A-1 REPL 0.09MI MP 0.66-2.32 PH1	2012	Removed	to support cost and construction efficiency. Removed from PH1 due to records verified.
68	23685	23685	DFM-1202-15 REPL 0.02MI MP 0.00-0.02 PH1	2012	Removed	Removed from PH1 due to records verified. Removed from PH1 due to records verified.
69 70	23778	23778	DFM-1509-04 REPL 0.01MI MP 0.78-0.78 PH1	2012	Removed	Removed from PH1 due to records verified. Removed and scope transferred to Valve Automation project (Bixler Rd. PH1
	23799	23799	L-057B REPL 0.01MI MP 10.32-10.32	2012	Removed	Removed and scope transferred to valve Automation project (Bixler Rd. PH1) Removed from PH1 due to records verified.
71	24883	24883	DFM-0804-01 REPL 0.01MI MP 0.21-1.16 PH1 DFM-0407-01 TIM TEST 3.90MI MP 0.59-4.34 PH1	2012	Removed	Delayed from 2012 to 2014 due to the downrating of a portion of the line in
72	23590 23558	25832 25811	DFM-0407-01 TIM TEST 3.90MI MP 0.59-4.34 PH1 DFM-0126-01 Test 0.07MI MP1.76-1.84 PH1	2012 2012	Delayed	Delayed from 2012 to 2014 due to the downrating of a portion of the line in Delayed from 2012 to 2014 to coordinate test with an existing customer-plar
73					Delayed	Removed from PH1 due to records verified.
L /4	24521	24524	L-300B_1 TEST 1.01MI MP 143.25-144.24 PH1	2011	Removed	Inchioved nonin nit due to records vermed.

tests for Integrity Management in 2012, and then due to

ion - pipeline going through Rousseau is scheduled for replacement

Integrity Management in 2012, then delayed from 2013 to 2014

tests for Integrity Management in 2012, and then due to

tests for Integrity Management in 2012, then delayed from 2013 to at class location, lowering the priority of this test.

sts, but then delayed further to reduce the impact on customers

sts, but then delayed further to reduce the impact on customers

sts, but then delayed further to reduce the impact on customers

ation on L-101 will be provided by the rebuild and valve automation ion unnecessary.

in 2011 as the specifications of this pipe met the criteria for testing

be moved to future phase as a result of data validation. Ning segment combined with an existing test project (PSRS 27608)

1) to support cost and construction efficiency.

n 2012 and to enable additional time to confirm test limits. anned outage (refinery) in 2014.

TABLE 26-1 PACIFIC GAS AND ELECTRIC COMPANY FORECAST PROJECTS NOT COMPLETED OR REPLACED BY HIGHER PRIORITY PROJECTS REPORTING PERIOD APRIL 1, 2011 – MARCH 31, 2013

	PSEP			PSEP		
	Filing			Filing		
Line #	PSRS	New PSRS	Project Description	Year	Current Status	Comments
75	24521	24523	L-300B_1 TEST 1.40MI MP 286.32-286.92 PH1	2011	Removed	Removed from PH1 due to records verified.
76	24521	24514	L-300B_1 TEST 5.59MI MP 472.65-478.10 PH1	2011	Removed	Removed from PH1 due to records verified.
77	24484	24485	DFM-1816-01_1 TEST 1.23MI MP 0.00-1.19 PH1	2011	Removed	Removed from PH1 due to records verified.
78	24484	24483	DFM-1816-01_1 TEST 0.30MI MP 1.19-1.53 PH1	2011	Removed	Removed from PH1 due to records verified.
						Delayed from 2012 to 2014 after scope changes involving the addition and re
79	24254	24254	R-042 SP-3 REPL 0.01mi MP 174.29-174.29 (HWY4) PH1	2012	Delayed	completion of engineering and constructability analysis, and to balance sched
						Removed as replacement project and new test project created to support cos
80	23617	23617	DFM-7226-02 REPL 0.03MI MP 0.27-0.41 PH1	2012	Removed	ft. under MID canal.
81	24484	23833	DFM-1816-01_1 TEST 1.91MI MP 1.53-3.44 PH1	2011	Removed	Removed from PH1 due to records verified.
82	24162	27599	SP5 TEST 0.17MI MP 5.4-5.57 PH1	2011	Removed	Removed from PH1 due to records verified.
						Removed from PH1 to future phase due to data validation that resulted in a c
83	24521	25923	L-300B_1 TEST 3.39MI MP 484.73-488.12 PH1	2011	Removed	address the impact of elevation changes along the line.
84	23779	23779	L-301G REPL 0.01MI MP 2.34-2.34 PH1	2012	Removed	Removed from PH1 due to records verified.
						Majority of scope removed from PH1 due to records verified; remaining singl
85	23770	23770	L-301A REPL 0.07MI MP 0.00-17.69 PH1	2012	Removed	and construction efficiency.
86	24160	24160	SP3 TEST 0.49MI MP 180.91-181.40	2011	Removed	Removed from PH1 due to records verified.

removal of pipe segments after records verification and to allow neduling and workload needs.

cost and construction efficiency - records verified for all except 153

change in class location and to allow additional engineering to

ngle segment combined with an existing test project to support cost