

**PACIFIC GAS AND ELECTRIC COMPANY'S  
SEVEN CIRCUIT INSPECTION REPORT  
SUBMITTED IN RESPONSE TO CPSD'S  
DECEMBER 7, 2011 LETTER AS AMENDED**

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## I. THE DECEMBER 7, 2011 LETTER AND ITS AMENDMENTS

This report is in response to a letter from the Consumer Protection and Safety Division (CPSD) of the California Public Utilities Commission (CPUC) dated December 7, 2011 (**Attachment 1**). In that letter the CPSD directed PG&E, for the five circuits listed below, to “identify, document, and correct any and all violations of General Orders (GOs) 95 and 128 by June 6, 2012”:

- McMullin Sub 1106
- Power House #2 1103
- Cotati 1105
- Watsonville 2101
- Brunswick 1106

The CPSD also directed PG&E, by June 6, 2012 to report to CPSD:

- Violations it identified
- Corrective actions taken, and
- How the information it learned from the corrective action process for these circuits will be integrated into PG&E's ongoing maintenance and inspection activities system wide.

On February 17, 2012, PG&E representatives met with CPSD representatives Michelle Cooke, CPSD Director, Julie Halligan, CPSD Deputy Director, and Raymond Fugere, ESRB Program and Project Supervisor, to better understand CPSD’s directive. At the meeting, PG&E described the many challenges it foresaw with complying with the requirements and timelines outlined in the December 7, 2011 letter, especially in relation to the volume of facilities on each circuit that require inspection and the substantial breadth of “inspections” that are required. On February 23, 2012 Mr. Fugere followed up the February 17 meeting with an email (**Attachment 2**) that modified the requirements of the December 7, 2011 letter. Mr. Fugere’s email amended the original requirements as follows:

- The deadline shall be extended from June 6, 2012 to December 31, 2012
- The following two additional circuits will be included in the study:
  - Burlingame 2101
  - Davis 1111
- PG&E should produce records for circuits on a rolling basis, once all violations on a circuit have been corrected; however, no later than December 31, 2012.

The seven circuits are listed in the table below:

<b>Division</b>	<b>Circuit</b>	<b>Mileage</b>
1. Peninsula	Burlingame 2101	8
2. Sacramento	Davis 1111	13
3. Fresno	McMullin Sub 1106	99
4. Yosemite	Power House #2 1103	83
5. Sonoma	Cotati 1105	143
6. Central Coast	Watsonville 2101	136
7. Sierra	Brunswick 1106	185
<b>Total</b>		<b>667</b>

On August 22, 2012 PG&E met telephonically with Mr. Fugere. PG&E expressed its need to extend the December 31, 2012 deadline for correcting all violations on the seven circuits set forth in Mr. Fugere's email of February 23, 2012. On September 4, 2012 PG&E sent a follow up letter (**Attachment 3**) to Mr. Raffy Stepanian, Program Manager for CPSD/ESRB, reiterating PG&E's need to extend the December 31, 2012 deadline due to the lengths of the circuits and the corresponding volumes of facilities that require GO 165 inspection, pole testing, pole loading reviews, vegetation inspections, and corrective action. Instead, PG&E committed to correction of all violations on each circuit by the following dates:

Division	Circuit	Violation Correction*
Peninsula	Burlingame 2101	12/31/12
Sacramento	Davis 1111	12/31/12
Fresno	McMullin Sub 1106	3/31/13
Yosemite	Power House #2 1103	6/30/13
Sonoma	Cotati 1105	6/30/13
Central Coast	Watsonville 2101	6/30/13
Sierra	Brunswick 1106	6/30/13

*\* As explained in the letter, pole replacements may not be completed by the dates listed above due to external restrictions (weather, joint tenants, permitting, etc.).*

PG&E also committed to the completion of all inspections and the submittal of a report by December 31, 2012 that describes the violations identified, corrective actions taken (or will be taken, based on the dates above), and how the information learned from the circuit-based process will be integrated into PG&E's ongoing maintenance and inspection activities system wide.

This report provides summary information pertaining to the reporting requirements mentioned above and information regarding activities that were proactively performed by PG&E to meet the intent of the December 7, 2011 letter and to ensure compliance with GOs 95 and 128<sup>1</sup>.

## II. SEVEN CIRCUIT INSPECTIONS

In order to meet the requirements set forth in CPSD's December 7, 2011 letter to "identify, document, and correct any and all violations of GOs 95 and 128", PG&E initiated special inspections and patrols for all seven circuits. Due to the broad requirements set forth by the CPSD for these circuit inspections, the following activities were performed by various work groups:

- PG&E's Compliance Inspectors with PG&E's Public Safety and Regulatory department performed detailed inspections (DIs) of all overhead (OH) and underground (UG) facilities on each circuit, documenting, and/or repairing all GO 95 and 128 violations identified. These inspections included normally planned GO 165 inspections, upgraded inspections for circuits or portions of circuits previously planned for patrols, and out of cycle inspections for facilities that were not planned to be inspected or patrolled in 2012.

<sup>1</sup> Details and supporting documentation for the information contained within this report are available upon request.

- PG&E's Pole Test and Treat (PT&T) department performed seven special patrols to confirm compliance with GO 165 and PG&E's pole test and treat requirements and intrusively inspected one division prior to its previously planned inspection year.
- PG&E's Customer Service Delivery department sampled poles on each circuit and performed load calculations on each sample pole to confirm compliance with GO 95, Section IV.
- PG&E's Vegetation Management (VM) department performed routine scheduled inspections, some on an accelerated schedule to inspect for compliance with GO 95, Rule 35.

The following sections are organized by the activities performed: OH and UG detailed inspections, pole test and treat, pole loading analyses, and vegetation management. In each section PG&E provides summary information including issues found, corrective actions taken, conclusions, and process improvement opportunities identified, as appropriate.

## **A. Overhead and Underground Detailed Inspections**

### **1) Implementation, Results and Corrective Actions**

The DIs began the week of April 16, 2012 and the final inspection was completed on October 20, 2012. Once identified, all violations were either documented and corrected at the time they were found, or documented with an Electric Corrective (EC) Notification<sup>2</sup> that was entered into PG&E's SAP database for tracking and scheduling. Minor work<sup>3</sup> (MW) performed by the inspection teams was documented on a modified daily inspection log for tracking and reporting purposes.

The approach for the circuit inspections was different than PG&E's present process for GO 165 detailed inspections. PG&E currently inspects by grid. However, due to CPSD's directive, PG&E performed these special inspections by circuit. As a result of the change in approach, PG&E made the following modifications to its normal DI process in preparation for the special inspections:

- All plat maps associated with each circuit were identified and all OH and UG facilities on each map, associated with the circuit, were counted, physically highlighted with marker and existing pending EC Notifications were flagged with an indicator at each applicable facility location on each plat map.
- An inspection schedule was developed and completion dates were set to meet the timeline of the CPSD's directive. Several factors for each circuit were considered when developing the schedule (e.g., length of circuit, weather, property access issues, terrain, etc.)

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2 A Notification is a term used to describe a work product created and generated in PG&E's SAP database for tracking and scheduling purposes.

3 Minor work is work that can be done safely by an individual in accordance with PG&E's safety practices. Examples of these are, repair of ground molding, replacement of a damaged guy indicator and caulking around pad-mounted equipment.

- Additional training and associated materials were developed and delivered to company personnel performing inspections to help ensure understanding and consistency with the modified processes and documentation requirements associated with the special inspections.
- Modified daily inspection logs were created specifically for the documentation of all MW performed at OH and UG facility locations.
- Two-person inspection teams were created, consisting of one Compliance Inspector and one Lineman, each familiar with the area where the circuit is located. Aside from UG manhole inspections, PG&E GO 165 inspections are normally performed utilizing only one person. The three largest circuits, Brunswick 1106, Cotati 1105, and Watsonville 2101 utilized at least two inspection teams in order to meet the inspection schedule.
- An internal Quality Management team was created, with the responsibility of evaluating the quality of completed inspections. This team also provided support to the inspection personnel to help ensure consistency during the inspections.

The following table describes, for each circuit inspected, the inspection start and finish dates, circuit mileage, and the number of actual OH and UG units inspected on each circuit.

Circuit	Start	Finish	Circuit Miles	OH Facilities	UG Facilities
Burlingame 2101	4/19/12	5/2/12	8	359	41
Davis 1111	4/19/12	5/26/12	13	370	142
McMullin Sub 1106	4/19/12	6/8/12	99	2,258	0
Power House #2 1103	4/19/12	6/11/12	83	1,740	15
Cotati 1105	4/16/12	8/6/12	143	3,555	98
Watsonville 2101	4/16/12	8/3/12	136	3,617	130
Brunswick 1106	4/17/12	10/20/12	185	5,734	238
<b>TOTAL</b>			<b>667</b>	<b>17,509</b>	<b>664</b>

For all conditions identified during the inspections, which were not performed as MW, a priority and due date assessment was created in accordance with PG&E's Electric Distribution Preventative Maintenance Manual. All assigned due dates for EC Notifications were then accelerated to meet the dates proposed by PG&E on August, 22, 2012 and in PG&E's September 4, 2012 letter.

PG&E’s priority codes used when assigning a recommended repair date are as follows:

- **Priority A** – Safety/Emergency Immediate Response (*an emergency is defined as any activity in response to an outage to customer(s) or an unsafe condition requiring immediate response/standby to protect the public*)
- **Priority B** – Urgent Compliance (**due within 3 months**).
- **Priority E** – Scheduled Compliance (**due within 12 months**).
- **Priority F** – Scheduled Compliance (**for regulatory conditions, the recommended repair date should be the next inspection date**).

As a result of the special inspections, a total of 2,639 EC notifications were generated and entered into PG&E’s SAP database for tracking and scheduling. There were also a total of 9,090 OH and UG locations where MW was performed. The following table shows the number of EC Notifications by priority and by circuit that were generated during the special inspections. The table also shows the number of locations where MW was performed on each circuit:

Circuit	EC Notification Priority				Circuit Totals	MW Locations
	A	B	E	F		
Burlingame 2101	0	0	70	74	144	45
Davis 1111	2	5	148	39	194	230
McMullin Sub 1106	0	14	146	4	164	904
Power House #2 1103	0	0	103	0	103	486
Cotati 1105	7	15	575	106	703	2,223
Watsonville 2101	0	22	445	454	921	1,629
Brunswick 1106	0	8	384	18	410	3,573
<b>Grand Totals</b>	<b>9</b>	<b>64</b>	<b>1,871</b>	<b>695</b>	<b>2,639</b>	<b>9,090</b>

## 2) Conclusions and Process Improvement Opportunities

PG&E does not believe that a circuit based process enhances safety or compliance for compliance inspections and patrols. CPSD mandated the inspection of specific circuits, which required PG&E to translate the current configuration of each circuit into a listing of the corresponding distribution plat maps. The translation process took extra time and, due to its manual nature, was susceptible to errors. Due to the changing nature of circuit configurations, it becomes highly probable that a circuit inspected in one year will not have the same configuration in the next year, requiring a “true-up” to ensure that all previously inspected facilities are caught. Accordingly, due to both the time-consuming and manual process of transferring from a plat map process to a circuit based process, and due to the constantly changing nature of circuit configurations that are not compatible with the strict GO 165 inspection and patrol cycles, PG&E does not plan to move to a circuit based inspection and maintenance process.

PG&E agrees that documenting all MW completed during inspections would be an improvement. PG&E will be integrating the documentation of MW into PG&E's ongoing maintenance and inspection activities system wide through PG&E's Mobile Inspection Process to be implemented during 2013.

## **B. Pole Test and Treat**

### **1) Implementation, Results and Corrective Actions**

PG&E's Pole Test and Treat (PT&T) department performs intrusive inspections on all wood poles older than ten years on a ten year cycle, which exceeds the frequency requirements in GO 165.<sup>4</sup>

Intrusive inspections are carried out on a system wide basis and detect poles with damage or decay from approximately 20 inches below ground line to a height of approximately six feet above ground. Intrusive inspection results are documented in PG&E's SAP database by an Electronic Documentation (ED) Notification. Poles that require stubbing are documented in SAP by a Stubbing (ST) Notification and those that require replacement have an EC Notification. The generated ST and EC Notifications are created in the SAP database for documentation, scheduling, and tracking.

Six of the seven circuits had an intrusive inspection performed within the last six years. The Power House #2 1103 circuit had an intrusive inspection performed in 2003. The Power House circuit was due for an intrusive inspection cycle in 2013, but was proactively inspected early in 2012 to meet the requirements of the CPSD's December 7, 2011 letter.

PG&E conducted special patrols on all seven circuits to verify compliance with GO 165, checking to confirm whether any poles should have been but were not tested and treated, and also confirming that those in need of stubbing or replacement were properly scheduled for action.

PG&E discovered 184 poles that did not have an intrusive inspection tag (showing the date when the pole had been tested and treated) physically attached to the pole and for which PG&E's SAP database did not have information confirming that the pole had been intrusively inspected. This information is presented by circuit in the table below along with the results of the intrusive inspections performed on these 184 poles after this discovery:

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4 GO 165 requires intrusive testing of all wood poles over 15 years old which have not been subject to intrusive inspection within 10 years, and intrusive test all wood poles over 15 years old which passed intrusive inspection on a 20 year cycle.



Circuit	Date Special Patrol Completed	Number of Poles Patrolled <sup>5</sup>	Poles without intrusive inspection tag and not found in SAP	Inspection Results for the 184 Poles		
				# of Poles to Stub	# of Poles to Replace	# of Poles that passed inspection
Burlingame 2101	4/23/12	406	5	1	0	4
Davis 1111	3/29/12	375	3	1	1	1
McMullin Sub 1106	5/11/12	2,639	24	1	1	22
Power House #2 1103 <sup>6</sup>	7/15/12	1,882	5	0	0	5
Cotati 1105	5/4/12	3,638	33	0	0	33
Watsonville 2101	6/29/12	3,740	102	2	3	97
Brunswick 1106	6/15/12	5,884	12	0	0	12
<b>Total</b>		<b>18,564</b>	<b>184</b>	<b>5</b>	<b>5</b>	<b>174</b>

The ten poles out of the 184 that need work will be replaced or stubbed by the deadlines set forth in PG&E's September 4, 2012 letter.

In addition, PG&E found two poles that were physically marked with an N tag<sup>7</sup> for replacement indicating that they had been identified as a candidate for replacement, but the work had not been performed and the information could not be found in PG&E's SAP database. One pole is on the Davis 1111 circuit, where PG&E's investigation indicates that this pole was identified for replacement during the time when PG&E was switching from a legacy database to SAP. At that time PG&E had a paper based process for adding poles to the legacy database, and for some reason this additional pole did not get entered into the SAP database. PG&E has now scheduled this work to be completed within the time frames set forth in PG&E's September 4, 2012 letter. The other pole is on the Cotati 1105 circuit in a customer's back yard, and was not on PG&E's map. PG&E is in the process of researching whether this is a PG&E owned or customer owned pole.

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- 5 Each circuit in this table has a greater number of poles than shown in the table on page 4 in the detailed inspection section. This is attributable to different methodologies for tallying poles. PT&T's pole count is a count of individual pole asset records from SAP. This count includes among other things records for push-poles, wood stub poles, multiple pole structures, poles and poles that have been physically removed from the field but SAP had not yet been updated. By contrast, the compliance detailed inspections performed by PG&E's Compliance Inspectors pole tally is a count of facilities on a plat map where push-pole and wood stubs are not tallied and multiple pole structures are counted as a single facility (not as two or three poles as in the PT&T count).
- 6 Poles on this circuit were intrusively tested early and also subsequently patrolled.
- 7 The term tag in this context is a physical metal tag attached to the pole whereas a Notification is a term used to describe a work product created and generated in PG&E's SAP database.

## 2) **Conclusions and Process Improvement Opportunities**

PG&E's PT&T department uses actual SAP data to identify poles to be intrusively tested. PT&T determined the 184 poles were not listed in SAP and therefore were not triggered to be intrusively tested during PG&E's PT&T process. The 184 poles include newly added tap lines, undocumented single poles, and short taps that cross map borders to another map.

To address this issue and improve asset registry and mapping systems, PG&E is:

- Developing an Enterprise wide Electric Distribution Graphical Information System (GIS), slated for implementation in 2014 that will replace existing legacy mapping systems and integrate mapping information and SAP.
- Implementing a Mobile Inspection platform, in 2013, for detailed inspections. This will enable those performing detailed inspections to capture poles that aren't in SAP and update SAP asset data.

### C. **Pole Loading Calculations**

#### 1) **Implementation, Results and Corrective Actions**

PG&E's Customer Service Delivery electric estimating personnel perform load calculations on all newly added poles and existing in-service poles that have load added to them. Load calculations are performed in adherence with PG&E's existing construction standards that either meet or exceed the strength requirements specified in GO 95, Section IV.

To meet the requirements of the December 7, 2011 letter, PG&E electric estimators were assigned the responsibility to identify a selection of poles<sup>8</sup> and perform load calculations on each sample. The program utilized for load calculations is a PG&E developed program designed to ensure GO 95 compliance.

The following table shows the circuit, number of poles evaluated on each circuit and the number of failures resulting based on the load calculations.

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8 Estimating personnel were instructed to select congested poles, so these were not random samples.

<b>Circuit</b>	<b>Calculations Performed</b>	<b>Did Not Pass</b>
Burlingame 2101	65	3
Davis 1111	66	4
McMullin Sub 1106	78	0
Power House #2 1103	78	0
Cotati 1105	85	30
Watsonville 2101	83	2
Brunswick 1106	90	0
<b>Total</b>	<b>545</b>	<b>39</b>

For any pole that was identified as overloaded, an EC Notification was created and entered into SAP for tracking and replacement of the pole. The following table describes the failure reasons for the failures by circuit:

<b>Circuit</b>	<b>Reason for and Number of Failures</b>			
	<b>Sidewalk strut adding excessive horizontal pressure on pole</b>	<b>Excessive leaning pole</b>	<b>Third party communication facilities overloaded the pole</b>	<b>PG&amp;E facilities overloaded the pole</b>
Burlingame 2101	2	-	-	1
Davis 1111	-	2	-	2
McMullin Sub 1106	-	-	-	-
Power House #2 1103	-	-	-	-
Cotati 1105	-	-	27	3
Watsonville 2101	-	-	2	-
Brunswick 1106	-	-	-	-

As can readily be seen, 27 of the 39 pole loading issues, or almost 70%, were due to third party communication facilities on the Cotati 1105 circuit. For the 27 pole locations on the Cotati circuit, PG&E's Joint Utility Program group is in the process of scheduling a meeting and conducting field visits with applicable communication owners to discuss concerns regarding the findings and determine possible solutions to remedy agreed upon concerns. In addition, all 39 poles that failed the pole loading calculations will be addressed by the deadlines set forth in PG&E's September 4, 2012 letter.

## 2) **Conclusions and Process Improvement Opportunities**

The process used to identify poles was not random as estimating personnel were instructed to select congested poles for evaluation. PG&E is reviewing and validating the overall results from the pole loading calculation component of the seven circuit inspection project. Following this validation process, PG&E will determine appropriate next steps which may include further sampling of localized or broader pole populations.

It is apparent, at minimum, that there is a need for improved communications between PG&E and applicable communication owners in regards to the accuracy of pole loading information and the sharing of that information between involved parties. Prior to the special inspection of the seven circuits, PG&E had already begun an assessment of the Joint Pole communication and pole loading processes utilizing an outside vendor. The assessment is examining new technologies to improve processes and communication, for example, looking at the possibility of a centralized database to store joint pole and pole loading information that is accessible by all involved. Additionally, the Northern California Joint Pole Association (NCJPA) has formed a team reviewing the capabilities of several vendors that can assist with improvements.

### **D. Vegetation Management**

#### **1) Implementation, Results and Corrective Actions**

On an annual basis, PG&E's Vegetation Management (VM) department performs inspections of distribution circuits to identify and/or correct any noncompliant or potentially non-compliant vegetation issues to ensure compliance with GO 95, Rule 35 and other state laws and regulations. PG&E utilizes contractors to perform inspections and any resulting work. Quality Control (QC) reviews are also performed by VM QC Contractors to ensure compliance with applicable requirements and quality work performance. QC reviews are completed in two phases, post inspection and post work. The reviews are performed monthly by VM Area and include locations on multiple circuits. VM interacts closely with their contractors that perform the work to ensure quality work performance and all applicable laws and regulations are met. VM has ongoing discussions with its contractors regarding any noncompliance issues that are identified and appropriate actions are taken to ensure that they do not recur.

In order to meet the requirements of the December 7, 2011 letter, two of the seven circuits were inspected outside of the regular inspection schedule (Watsonville 2101 and Brunswick 1106) resulting in additional resources needed to meet scheduled completion dates. The inspections ended in March 2012. Additional QC reviews were also performed on each circuit to ensure compliance with GO 95, Rule 35. This QC activity also required additional resources.

There were a total of 667 miles of distribution lines inspected and a total of 13,049 trees worked (i.e., trimmed or removed). Throughout the inspections VM personnel worked through various issues to complete the inspections and the associated work, e.g.,

environmental issues, customer refusals and access issues. There were 41 GO 95, Rule 35 encroachments identified and all items were corrected and brought into compliance.

The following table shows the GO 95 Rule 35 encroachments identified on each circuit and the status of the work performed:

<b>Circuit</b>	<b>Encroachments</b>	<b>Tree Condition</b>	<b>Root Cause &amp; Work Status</b>
<b>Burlingame 2101</b>	<b>0</b>	<b>0</b>	-
<b>Davis 1111</b>	<b>0</b>	<b>0</b>	-
<b>McMullin Sub 1106</b>	<b>0</b>	<b>0</b>	-
<b>Power House #2 1103</b>	<b>0</b>	<b>0</b>	-
<b>Cotati 1105</b>	<b>36</b>	<b>36 trees and/or branches less than 18" from primary</b>	<ul style="list-style-type: none"> <li>• 32 trees missed on 2011 Routine Patrol</li> <li>• 2 trees with insufficient clearance missed by Tree Contractor in 2011</li> <li>• 1 tree with insufficient clearance missed by Pre- Inspector in 2011</li> <li>• 1 tree not worked by Tree Contractor in 2011</li> <li>• work complete at all locations</li> </ul>
<b>Watsonville 2101</b>	<b>0</b>	<b>0</b>	-
<b>Brunswick 1106</b>	<b>5</b>	<b>5 trees and/or branches less than 18" from primary</b>	<ul style="list-style-type: none"> <li>• 4 trees within 18" due to outside influences; 2011 storm conditions caused snow loading and tree failures after 2011 routine patrol and trim</li> <li>• 1 tree missed by Pre-Inspector</li> <li>• work completed at all locations</li> </ul>

## **2) Conclusions and Process Improvement Opportunities**

For the special circuit inspections PG&E's VM group adjusted its current annual inspection schedule and performed additional QC reviews with a circuit approach versus an area approach to ensure compliance with GO 95 Rule 35 and to meet the deadline of the December 7, 2011 letter. Performing the inspections off-cycle had a potential negative effect on compliance due to seasonal growth rate of different vegetation types, required additional resources, and generated additional costs. Performing additional circuit based QC reviews also required additional resources and generated additional costs.

With respect to the Cotati 1105 circuit and the thirty-six encroachments, PG&E has worked with the local pre-inspectors and tree contractor to develop both short term and longer term corrective actions. The short term corrective actions included increased clearances for those trees identified as compliance issues. The longer term corrective

actions included a more thorough review of historical circuit patrol information to identify areas to focus on during the routine patrol.

PG&E's VM program is recognized as one of the leading vegetation management programs in the nation and takes seriously its responsibility of ensuring safety to the public, protection of the environment and providing high-quality reliable electric service to PG&E's customers. PG&E's VM group recommends that its current inspection approach and process remain the same.

### III. SUMMARY OF CONCLUSIONS AND PROCESS IMPROVEMENTS

During the preparations and performance of the DIs and associated activities, PG&E identified ways to improve its current processes.

PG&E involved several work groups and adjusted schedules to patrol or inspect the seven circuits to ensure their condition was in compliance with applicable rules within GOs 95, 128 and 165. All violations and potential violations were identified and either documented for accelerated scheduled repair or corrected at the time they were identified. It is important to note that as time passes and these circuits are exposed to outside forces, such as environmental conditions or third party actions, their conditions will inevitably change. Some issues may currently exist on these circuits that may not have existed at the time of the special inspections and associated activities.

PG&E builds safety and quality into all of its processes and is constantly looking for ways to improve them. PG&E takes seriously the findings resulting from these special inspections and is committed to making the identified improvements to its inspection and maintenance processes.

### IV. ASSOCIATED COSTS

The following table shows the actual costs associated with each activity described in Section II on each circuit and their grand totals:

Circuit	OH & UG DIs	PT&T	PLC	VM	Circuit Totals
Burlingame 2101	\$33,858	\$8,682	\$22,552	\$2,500	<b>\$67,592</b>
Davis 1111	\$98,267	\$6,250	\$22,900	\$2,500	<b>\$129,917</b>
McMullin Sub 1106	\$223,080	\$7,637	\$27,027	\$2,500	<b>\$260,244</b>
Power House #2 1103	\$92,669	\$11,803	\$27,027	\$3,500	<b>\$134,999</b>
Cotati 1105	\$476,799	\$25,691	\$27,409	\$3,000	<b>\$532,899</b>
Watsonville 2101	\$417,946	\$20,365	\$27,756	\$23,000	<b>\$489,067</b>
Brunswick 1106	\$1,010,845	\$43,274	\$27,756	\$3,000	<b>\$1,084,875</b>
<b>Grand Totals</b>	<b>\$2,353,464</b>	<b>\$123,702</b>	<b>\$182,427</b>	<b>\$40,000</b>	<b>\$2,699,593</b>

The following table shows, as of December 3, 2012, the actual year to date (YTD) total costs for completing pre-existing EC Notifications, as well as newly identified EC Notifications that were created as a result of the “special” detailed inspections (DIs) and pole loading calculations (PLCs) of the seven circuits. The table also shows the costs forecasted for pending EC Notifications of the same categories that will be completed in 2013:

<b>Circuit</b>	<b>YTD Actuals Costs for Completed Pre-existing ECs and ECs Created During DIs &amp; PLCs</b>	<b>Forecasted Costs for Pending Pre-existing ECs and ECs Created During DIs &amp; PLCs</b>	<b>Circuit Totals</b>
Burlingame 2101	\$124,968	\$207,546	<b>\$332,514</b>
Davis 1111	\$712,839	No ECs Pending	<b>\$712,839</b>
McMullin Sub 1106	\$195,537	\$186,926	<b>\$382,463</b>
Power House #2 1103	\$165,526	\$793,709	<b>\$959,235</b>
Cotati 1105	\$1,223,080	\$2,057,841	<b>\$3,280,921</b>
Watsonville 2101	\$639,026	\$1,791,018	<b>\$2,430,044</b>
Brunswick 1106	\$653,123	\$1,151,605	<b>\$1,804,728</b>
<b>Grand Totals</b>	<b>\$3,714,099</b>	<b>\$6,188,645</b>	<b>\$9,902,744</b>

PG&E completed all EC Notifications on the Davis 1111 circuit prior to December 31, 2012, except for the pole mentioned on page 7 that had an “N” tag identifying it for replacement but the information could not be found in SAP. However, as of this report’s submittal date, not all EC Notifications have been completed on the Burlingame 2101 circuit. Instead, as committed to the CPUC on August 22, 2012, PG&E will complete all *non-pole* EC Notifications prior to 12/31/12. Seven (7) *pole* related EC Notifications may not be completed by 12/31/12 due to external restrictions (weather, permitting, joint tenants, etc.), but will be scheduled for completion based on the evaluation of the asset.

The following table outlines the total forecasted cost to complete the seven circuit special inspection project:

<b>Circuit</b>	<b>Circuit Grand Totals</b>
<b>Burlingame 2101</b>	<b>\$400,106</b>
<b>Davis 1111</b>	<b>\$842,756</b>
<b>McMullin Sub 1106</b>	<b>\$642,707</b>
<b>Power House #2 1103</b>	<b>\$1,094,234</b>
<b>Cotati 1105</b>	<b>\$3,813,820</b>
<b>Watsonville 2101</b>	<b>\$2,919,111</b>
<b>Brunswick 1106</b>	<b>\$2,889,603</b>
<b>Project Grand Total</b>	<b>\$12,602,337</b>



## Attachment 1

STATE OF CALIFORNIA

EDMUND G. BROWN JR., Governor

### **PUBLIC UTILITIES COMMISSION**

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



December 7, 2011

Mark S. Johnson, Vice President  
Electric Operations and Engineering  
Mail Code B32  
P.O. Box 770000  
San Francisco, CA 94177

Dear Mr. Johnson:

The Consumer Protection and Safety Division (CPSD) of the California Public Utilities Commission (Commission) hereby directs Pacific Gas and Electric (PG&E) to identify, document, and correct any and all violations of General Orders (GOs) 95 and 128 on the San Joaquin Powerhouse 1103, Watsonville 2101, McMullen 1106, Brunswick 1106 and Cotati 1105 circuits by June 6, 2012.

On June 6, 2012, PG&E should report to CPSD the violations it identified, corrective actions taken, and how the information it learned from the corrective action process for these circuits will be integrated into PG&E's ongoing maintenance and inspection activities system wide. PG&E should provide copies of the most recent inspection, patrol, and maintenance records for these circuits. CPSD staff will audit these circuits to ensure that all violations of GOs 95 and 128 have been corrected. Violations discovered by CPSD staff will result in CPSD pursuing penalties, of up to \$50,000 per violation per day. Our goal is for PG&E to identify and mitigate risks on these circuits and to improve our understanding of how various violations (or near violation conditions) interact with each other and external conditions in a manner that can result in harm to the public or utility employees.

Nothing in this directive should be construed as altering, reducing or extending the authority of the Commission to impose penalties for existing violations of GO 95 under Public Utilities Code, Section 2107.

Should PG&E not be able to meet the June 6, 2012 requirement or have questions concerning this letter, please feel free to contact Raymond G. Fugere of my staff at (213)576-7015 or [raymond.d.fugere@cpuc.ca.gov](mailto:raymond.d.fugere@cpuc.ca.gov).

Thank you for your anticipated prompt attention to this matter.

Sincerely,

Raffy Stepanian, Program Manager  
Consumer Protection and Safety Division

## Attachment 2

**From:** Fugere, Raymond G. [<mailto:raymond.fugere@cpuc.ca.gov>]  
**Sent:** Thursday, February 23, 2012 1:32 PM  
**To:** Martinez, P.J. (ET)  
**Cc:** Halligan, Julie; Cooke, Michelle; Stepanian, Raffy; Deal, Jeffrey; Redacted Jacobson, Erik B (RegRel); Lemler, Gregg  
**Subject:** Follow Up To February 17 Meeting

Mr. Martinez

The Consumer Protection and Safety Division (CPSD) has discussed the issues raised by yourself and the other PG&E representatives during our February 17, 2012 meeting concerning the December 7, 2011 letter. CPSD has decided to amend the letter as follows based upon the issues raised at the meeting:

- The deadline shall be extended from June 6, 2012 to December 31, 2012
- The following two additional circuits will be included in the study:
  - Burlingame 2101
  - Davis 1111
- PG&E should produce records for circuits on a rolling basis, once all violations on a circuit have been corrected; however, no later than December 31, 2012

Should you or your staff have any questions or comments concerning this email, please feel free to contact me.

Sincerely,  
Raymond G. Fugere, P.E.  
Program and Project Supervisor  
Electric Safety and Reliability Branch  
320 W 4th Street, Suite 500  
Los Angeles, CA 90013  
Phone: (213)-576-7015  
Fax: (213)-576-7013

### Attachment 3



Redacted

Manager  
Distribution Compliance

245 Market St., 926  
San Francisco, CA 94105

Redacted

September 04, 2012

Mr. Raffy Stepanian, P.E. Program  
Manager, CPSD/ESRB California  
Public Utilities Commission  
320 W 4th Street, Suite 500  
Los Angeles, CA 90013

Subject: CPUC Circuit Inspections - Follow Up to 8/22/12 Meeting with Mr. Raymond Fugere

Dear Mr. Stepanian:

On August 22, 2012, PG&E met telephonically with Mr. Raymond Fugere, PP&S for the CPUC's ESRB. In this conversation PG&E expressed its need to extend the December 31, 2012, deadline for completing all inspections and correcting all violations on the seven circuits set forth in Mr. Raymond Fugere's email of February 23, 2012.

Due to the lengths and corresponding volumes of facilities that require GO 165 inspection, pole testing, pole loading reviews, vegetation inspections, and corrective action, PG&E is unable to meet the December

31, 2012 deadline for corrective action on all circuits. Instead, PG&E commits to correction of all violations on each circuit by the following dates:

<b>Division</b>	<b>Circuit Name</b>	<b>Violation Correction*</b>
Peninsula	Burlingame – 2101	12/31/12
Sacramento	Davis – 1111	12/31/12
Fresno	McMullin Sub – 1106	3/31/13
Yosemite	Power House #2 – 1103	6/30/13
Sonoma	Cotati – 1105	6/30/13
Central Coast	Watsonville – 2101	6/30/13
Sierra	Brunswick – 1106	6/30/13

Table 1 – Revised CPUC Circuit Inspection Completion Dates

\* Pole replacements may not be completed by the dates listed above due to external restrictions (weather, permitting, joint tenants, etc.), but will at minimum be completed by internal program dates that are based on the evaluation of the asset.

As required by Mr. Raymond Fugere's email of February 23, 2012, PG&E will complete all inspections and submit a report by December 31, 2012 that describes the violations identified, corrective actions taken (or will be taken, based on the dates above), and how the information learned from the circuit-based process will be integrated into PG&E's ongoing maintenance and inspection activities system wide.

Please contact me at Redacted if you have any questions regarding this matter.

Sincerely,

/s/

Redacted

Manager, Distribution Compliance

cc: Mr. P.J. Martinez, Vice President, Asset Management, PG&E  
Mr. Jeffrey Deal, Director, Compliance & Risk Management, PG&E Mr.  
Erik Jacobson, Senior Director, Regulatory Relations, PG&E  
Mr. Raymond Fugere, PP&S, CPUC ESRB