

From: [Redacted]  
Sent: 5/16/2013 2:11:36 PM  
To: Tse, Rick (rick.tse@cpuc.ca.gov) (rick.tse@cpuc.ca.gov)  
Cc: Jacobson, Erik B (RegRel) (/O=PG&E/OU=Corporate/cn=Recipients/cn=EBJ1);  
Fenrick, Alicia (Law)  
(/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=AWF9); Allen, Thomas  
(/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=HTA1)  
Bcc:  
Subject: RE: Following up on Kern Power Plant incident

Rick,

Attached is the recently updated work plan for removing the fuel storage tanks at KPP [CWC Safe Work Plan – Tanks –Tank Farm 05-15-13.pdf]. This alternate work plan was developed for removing the remaining three tanks. This is a significant change to the August 2012 revised work plan which included stitch cutting the walls of the tank with torches. The manual pre-cutting in the procedure is for the stiffener at the top of each tank and for the interior cross bracing of the tank lids that are sitting inside on the bottom of the tanks.

Tank #1 is the partially removed tank where the incident occurred. The file [Stamped Tank #1 Work Plan 8-15-12.pdf] is a specific work plan for taking this tank down that was submitted to and approved by Cal-OSHA. The intent would be to use this plan to remove tank #1.

I have also attached the August 2012 revised work plan [Stamped Tank Farm Work Plan 8-15-12.pdf] so that you can compare.

Please let me know if you have any questions.

Thanks,

[Redacted]

PG&E, Regulatory Relations

[Redacted]

**From:** Tse, Rick [<mailto:rick.tse@cpuc.ca.gov>]  
**Sent:** Tuesday, May 07, 2013 8:17 AM  
**To:** [Redacted]  
**Cc:** Jacobson, Erik B (RegRel); Allen, Thomas; Fenrick, Alicia (Law)  
**Subject:** RE: Following up on Kern Power Plant incident

Thank you, Jason! We'll review this and get back to you quickly.

Thanks,

Rick

(415) 355-5581

**From:** [Redacted]  
**Sent:** Monday, May 06, 2013 9:37 AM  
**To:** Tse, Rick  
**Cc:** Jacobson, Erik B (RegRel); Allen, Thomas; Fenrick, Alicia (Law)  
**Subject:** RE: Following up on Kern Power Plant incident

Rick,

Please find attached the Contractor Safety Guidance Document.

Thanks,

[Redacted]

Regulatory Relations, PG&E

[Redacted]

**From:** Tse, Rick [<mailto:rick.tse@cpuc.ca.gov>]  
**Sent:** Tuesday, April 30, 2013 10:01 AM  
**To:** [Redacted]  
**Cc:** Jacobson, Erik B (RegRel); Allen, Thomas; Fenrick, Alicia (Law)  
**Subject:** RE: Following up on Kern Power Plant incident

Hi [Redacted]

Per our phone conversation, we would like to request a copy of the **Contractor Safety Guidance Document** to further our review.

Thanks,

Rick

(415) 355-5581

**From:** [Redacted]  
**Sent:** Thursday, April 25, 2013 11:01 AM  
**To:** Tse, Rick  
**Cc:** Jacobson, Erik B (RegRel); Allen, Thomas; Fenrick, Alicia (Law)  
**Subject:** RE: Following up on Kern Power Plant incidentety g

Rick,

PG&E believes that almost all of the eight recommendations will be addressed through our new Contractor Safety Program. More detail on our contractor safety program, including the pilots with 3rd party vendors is provided below the discussion on each individual recommendation. We would be happy to meet with you to discuss the report and PG&E's process improvement plans at your earliest convenience. Please let me know if you have any questions or need additional information to complete your review. We would like approval to resume demolition of the oil tanks and boiler as soon as possible after your review of the report.

[Redacted]

Regulatory Relations, PG&E

[Redacted]

## Summary of the Contractor Safety Program

Our new contractor safety program was developed through benchmarking with leading companies in contractor safety (utilities and non-utilities), interviewing suppliers who have extensive experience in this area, performing SWOT analysis with existing suppliers, internal interviews with safety managers, line of business experts, and sourcing professionals. We also completed a pilot with four contractors in the fourth quarter 2012.

Our 2013 contractor safety program consists of four basic elements:

### **1. Pre-Qualification (Qualifies contractors to work for PG&E that meet Safety and Sourcing standards)**

Sets safety criteria, requirements, fit (culture), safety performance, use of Third Party Administrator for validation

### **2. Contract Requirements/Performance (Clearly communicates contract terms and performance expectations)**

Standard terms are recommended to ensure that safety expectations are clearly defined, legally binding, and included in contract documents like but not limited to the General Conditions, Contract Terms and Master Service Agreement.

### **3. Job Site Contractor Oversight (Ensures site specific safety plans, roles and responsibilities)**

Contractor oversight is essential to ensuring that contractor safety performance meets PG&E's expectations and contractual requirements. Contractor Oversight serves to communicate PG&E's commitment to safety and underscore the contractor's responsibility and accountability for the safety of their personnel, the general public, PG&E employees, safe jobsites and work processes for the duration of the contract.

### **4. Post Job Evaluations (Evaluates performance, continuous improvement)**

Contractor safety performance must be evaluated and results communicated within PG&E. Performance evaluations will be tracked through the use of a Third Party Administrator and used for future contracting decisions.

We have started with 25 Suppliers (10 each from Gas and Electric; 5 from Energy Supply) who were picked by the line of business with concurrence from Safety and Sourcing. These suppliers were selected based on the critical safety nature of the work performed. Our plans are to expand the program to include additional suppliers as the program is implemented throughout this year.

Below are PG&E's responses to each of the eight recommendations. As you can see, aside from recommendations 4 and 8, the Contractor Safety Program addresses the BV recommendations.

## **7.0 RECOMMENDATIONS FOR POSSIBLE PGE PROGRAM AND/OR MANAGEMENT SYSTEMS IMPROVEMENTS**

The contract between CWC and PGE clearly states that CWC has full responsibility for the safety and safety oversight of any and all activities that take place on the site. Under these circumstances, PGE's ability to prevent an accident would largely be limited to their choice of contractor to perform the demolition. Therefore the following recommendations focus mostly on possible improvements to PGE's management systems for procuring services. These recommendations are suggestions for improvements to PGE's management systems and programs based on best practices and should not be construed in any way to suggest a failure of any due diligence on PGE's part in hiring CWC.

### **RECOMMENDATION #01**

#### **APPLICABLE CAUSES/FACTORS – 2.10, 2.11, 3.10, and 3.11**

#### **CONTRACTOR QUALIFICATION**

PGE's procurement process should examine disciplinary policies as part of contractors' safety qualification. In California a company's disciplinary policy should be found in the company's Injury – Illness Prevention Program. (Note: CWC has a disciplinary policy.)

PG&E Response: The Contractor Safety Program includes pre-qualification – which examines, among other things, disciplinary policies as part of a contractor's safety qualification. Pre-qualification is one of the basic elements of the Contractor safety program, and sets safety criteria, requirements, fit (culture), and safety performance. Further, under the Contractor Safety Program, the Third Party Administrator (TPA) uses the questionnaire to pre-qualify and verify contractor disciplinary policies..

### **RECOMMENDATION #02**

## **APPLICABLE CAUSES/FACTOR – 1.08, 2.08, 3.08 and 4.1**

### **CONTRACTOR QUALIFICATION**

Procurement process should examine and put a high value on contractor's policies regarding prescription drugs and drug testing as part of contractors' safety qualification. (Note: CWC has a policy regarding prescription drug use.)

PG&E Response: The Contractor Safety Program includes pre-qualification – which examines, among other things, the contractor's policies regarding prescription drugs and drug testing as part of a contractor's safety qualification. Pre-qualification is one of the basic elements of the Contractor safety program, and sets safety criteria, requirements, fit (culture), and safety performance. Further, under the Contractor Safety Program, PG&E utilizes a Third Party Administrator (TPA) to pre-qualify and verify contractor policies regarding drug testing.

### **RECOMMENDATION #03**

## **APPLICABLE CAUSES/FACTORS – 6.1, 6.01, 6.02, and 6.03**

### **CONTRACTOR QUALIFICATION**

The formal safety training and safety certifications of contractors' proposed site safety officers should be evaluated before they are accepted in that role during the bid process. (Note: CWC's site safety officer at KPP has training in asbestos and hazardous waste, an undergraduate degree in construction technology, and five years experience as a site safety officer. It is possible his lack of certification and/or formal training in safety management and risk assessment may have been contributing factors to his not recognizing and addressing the hazards involved in the events leading up to the accident. )

PG&E Response: The Contractor Safety Program includes pre-qualification – which examines, among other things, safety training and safety certifications of contractors' proposed site safety officers as part of a contractor's safety qualification. Pre-qualification is one of the basic elements of the Contractor safety program, and sets safety criteria, requirements, fit (culture), and safety performance. In the Contractor Safety Guidance Document, there is a reference in Section 6.5 – Contractor/Supplier indicating the requirement of a Safety Professional. The Contractor Pre-Qualification Questionnaire, Appendix A-1 requires contractors to submit the type of training their Supervisors and Foreman receive.

The Contractor Pre-Qualification Questionnaire – Safety Performance History, Appendix A-2 has a section requiring contractors to indicate if they have Safety Professionals on their staff. Further, under the Contractor Safety Program, PG&E utilizes a Third Party Administrator for validation of pre-qualification.

### **RECOMMENDATION #04**

## **APPLICABLE CAUSES/FACTORS 5.2**

### **CHANGE MANAGEMENT**

When significant changes in the work methods agreed upon during the bidding process are proposed, there should be a risk assessment conducted on the proposed new process including a discussion of additional hazards and risks, necessary mitigation, and potential costs. It is unclear why such an assessment did not happen when CWC chose to change the agreed upon process for demolishing tanks. It is also unclear why CWC chose to change the agreed upon process for demolishing tanks. PGE's on-site representative should raise a red flag when aware of such changes so that the change can be evaluated for new hazards and risks.

PG&E Response: One of the basic elements of the Contractor Safety Program is Contract Requirements/Performance, which clearly communicates contract terms and performance expectations. PG&E's contracting practice includes terms related to re-evaluation of safety plans and practices when getting the job done requires a change in work methods. In the case of the Kern Power Plant Demolition project, there was no actual change in work methods. BV's conclusion that a change in work methods occurred comes from a possible misreading or misunderstanding of the work plan related to the phrase "mechanical means". CWC asserts and PG&E concurs that CWC followed the agreed upon work method related to the tank demolition, and so in the case of the Kern Power Plant Demolition project, this recommendation would not be applicable. Nonetheless, PG&E acknowledges the issue raised as an important one, and believes that its current contracting practices meet the recommendation outlined by the BV report.

### **RECOMMENDATION #05**

#### **APPLICABLE CAUSES/FACTORS – n/a**

### **CONTRACTOR QUALIFICATION**

The role and responsibilities of any PGE on-site representative should be clearly defined in writing and communicated to all on-site and project staff and contractors in future similar projects. The qualifications of candidates performing that role should be carefully evaluated, especially as it pertains to any assigned safety responsibilities. (Note: Although it was clearly understood that the PGE on-site representative at KPP has no assigned safety responsibilities since the contract unambiguously places the full responsibility for all site safety matters with CWC, the exact role and responsibilities of the PGE representative on site were not clearly defined. It was noted that his diligence in tracking the progress of the project is why we have a video record of the accident to review.)

PG&E Response: The Contractor Safety Program includes as one of its basic elements, Job Site Contractor Oversight. The Contractor Safety Program ensures that for each job, there is a site-specific safety plan, with clear roles and responsibilities established. In the Contractor Safety Guidance Document, there are 13 elements that require the Line of Business to oversee the Contractor to assess and mitigate worksite safety. Job Site Contractor Oversight is essential to ensuring that contractor safety performance meets PG&E's expectations and contractual requirements. Contractor Oversight serves to communicate PG&E's commitment to safety and underscore the contractor's responsibility

and accountability for the safety of their personnel, the general public, PG&E employees, safe jobsites and work processes for the duration of the contract. Further, PG&E conducts a formal lessons learned at the end of all major projects. A major component of the lessons learned is safety. These lessons learned are documented and used to improve subsequent projects.

## **RECOMMENDATION #06**

### **APPLICABLE CAUSES/FACTOR – n/a**

#### **TRAINING and LEARNING FROM EVENTS**

To maximize and capture learnings from events to foster continuous improvement in the training of future site representatives there should be a written record of the takeaway lessons learned during projects. (Note: Contractors hired for their existing expertise, usually require little training to perform their work, beyond a general orientation to the company. For this reason, PGE's training management systems were not examined in detail as part of this RCA. However, it was noted that the current on-site representative received some orientation benefit by spending a limited amount of time working with the previous incumbent before he left that role. Also, there is an ongoing daily teleconference of on-site representatives from several projects that is used to discuss issues and share solutions. Lastly, the on-site representative at KPP benefits from weekly one or two day visits from his PGE manager.)

PG&E Response: The Contractor Safety Program includes elements to communicate lessons learned and best practices. They are included in the Contract Terms and Safety Committee Charter. Post-Job Evaluations are conducted to evaluate performance and promotes continuous improvements. Contractor safety performance must be evaluated and results communicated within PG&E, which is available through the use of a Third Party Administrator and used for future contracting decisions.

## **RECOMMENDATION #07**

### **APPLICABLE CAUSES/FACTOR – 7.0**

#### **CONTRACTOR QUALIFICATION**

Procurement should consider employing a 3<sup>rd</sup> party specializing in assessing contractors' safety programs and validating/tracking/ contractors' safety and insurance data. Pacific Industrial Contractor Screening (PICS) and ISNetWorld are two well respected vendors of these services. (Note: PGE's Procurement group has also identified this potential improvement as part of their review.)

PG&E Response: On 3/1/2013, PG&E contracted with PICS to provide metrics, program verification and document management. For 2013, PG&E will be tracking 25 suppliers that support the Energy Supply, Gas Operations and Electric Operations lines of business. A broader implementation and establishing metrics is planned for 2014.



## RECOMMENDATION #08

### APPLICABLE CAUSES/FACTOR – N/A

### LEARNING FROM EVENTS

Future tank demolition should follow the agreed upon contract language and use mechanical means avoiding the use of manual labor whenever possible. (Note: CWC's proposal for future tank demolition reduces risks significantly by prohibiting workers from being inside the tank while mechanical means are employed.)

PG&E Response: As stated in the response to Recommendation #4, in the case of the Kern Power Plant Demolition project, there was no deviation from the agreed upon work methods. BV's conclusion that a change in work methods occurred comes from a possible misreading or misunderstanding of the work plan related to the phrase "mechanical means". CWC asserts and PG&E concurs that CWC followed the agreed upon work method related to the tank demolition, and so in the case of the Kern Power Plant Demolition project, this recommendation would not be applicable. Nonetheless, CWC has changed the method that it will use to complete the remainder of the tank demolition so that no workers will be inside the tank while mechanical means are employed.

**From:** Tse, Rick [mailto:rick.tse@cpuc.ca.gov]  
**Sent:** Monday, April 15, 2013 3:47 PM  
**To:** Redacted  
**Subject:** RE: Following up on Kern Power Plant incident

Hi Redacted,

My phone is not working at the new building. But yes, I do have questions about what corrective actions PG&E has taken in response to BV's recommendations. BV made 8 recommendations in the report. I want to know what PG&E has done to address each of those recommendations. For example, Recommendation #3 proposes PG&E to do more due diligence on checking a contractor's safety officer's qualifications before accepting a bid. BV noted CWC's safety officer lacked the training that COULD have prevented the accident.

BV also identified other gaps in PG&E's procurement process. For example, Recommendation

#4 asks why PG&E failed to reassess risks when CWC changed its original work plan. CWC switched from heavy equipment to manual labor. Recommendation #5 suggests PG&E to better define & communicate to contractors what its onsite rep's responsibilities are.

We also want to know how far along PG&E's pilot program is in using 3<sup>rd</sup> party specialists to evaluate vendors.

It's unfortunate that a person died. I think this is a good chance to reexamine and improve things to prevent, or at least minimize, its recurrence. Please write us a letter stating what PG&E has done so far in response to each of BV's 8 recommendations.

Thanks,

Rick

**From:** Redacted  
**Sent:** Monday, April 15, 2013 1:25 PM  
**To:** Tse, Rick  
**Subject:** Following up on Kern Power Plant incident

Hello Rick,

I'm writing to follow up with you on the Kern Power Plant - BV root cause analysis report. In your voicemail you indicated that you had some questions regarding the report. I would like to set up a meeting with you to discuss those questions.

Thanks,

Redacted

PG&E, Regulatory Relations

Redacted

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