From: Jacobson, Erik B (RegRel Sent: 7/21/2014 11:43:10 AM To: Lok, Ronald E. (ronald.lok@cpuc.ca.gov) Tse, Rick (rick.tse@cpuc.ca.gov); Lok, Ronald E. (ronald.lok@cpuc.ca.gov) Cc: Bcc: Subject: RE: Kern Power Plant - Demolition Charge Location Diagrams Ron, I will follow-up and get back to you. Thanks, Erik > On Jul 21, 2014, at 8:36 AM, "Lok, Ronald E." < ronald.lok@cpuc.ca.gov > wrote: > Erik. > We still need further clarification and evidence to verify Exponent's response to our questions. The attached photo is taken from Demtech's "Explosion Demolition Plan", it is located on page 27 where it shows the charge locations, and the boiler before and after the explosion. Please respond to the following CPUC Comments to your response below: > Exponent is aware that there are differences between Demtech's Explosive Demolition Plan and our Protocol for Evidence Retrieval. We agree with Mr. Lok that reliable information regarding locations of charges is very important to ensuring the evidence retrieval and storage is done appropriately and can be relied upon by investigators performing root cause analyses. > Please find below specific responses to Mr. Lok's questions. The Exponent diagram shows "kicker" charges, but the Demtech diagram does not show any "kicker" > 1. charges. Additionally, Demtech's "Explosive Demolition Plan" in Item 1.A (Explosive Materials to be Used), does not list a kicker explosive charge to be used. > Exponent's charge locations as shown in our protocol are based on photographs of the charge placements prior to blasting, discussion with PG&E personnel who witnessed placement of the charges, and review of the video coverage of the explosions. We believe that for reasons unknown the blasting subcontractor modified their explosive demolition design subsequent to the preparation of their plan. Based on the totality of the information we have received to date, we believe the charge locations as shown in our protocol are accurate. > CPUC Response to Exponent's Comment: The attached photograph does not show "kicker" charges but Exponent states that they have photographs that show the "kicker" charges. Exponent is requested to submit photographs showing the existence of the "kicker" charges on the first and second row columns.

An LSC (Linear Shape Charge) is shown on column's 5 & 6 (third row) of Demtech's diagram, but

missing from Exponent's Diagram.

> Exponent's charge locations as shown in our protocol are based on photographs of the charge placements prior to blasting, discussion with PG&E personnel who witnessed placement of the charges, and review of the video coverage of the explosions. We believe that for reasons unknown the blasting subcontractor modified their explosive demolition design subsequent to the preparation of their plan. Columns on lines 5 and 6 are currently exposed in the post-demolition condition. There is no evidence of linear shape charges on these columns. Based on the totality of the information we have received to date, we believe the charge locations as shown in our protocol are accurate.
> CPUC Response to Exponent's Comment: Exponent is requested to provide photograph(s) to verify that the third row columns did not have an LSC installed.
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> 3. The LSC charges are shown at the top elevation of columns 7-1/8 <x-apple-data-detectors: 2=""> and 3-7/8<x-apple-data-detectors: 3="">(second row) on Exponents Diagram, but shown on the middle (lower) elevation on Demtech's Demo Diagram. Demtech diagram shows these charges to be plus/minus 10 feet from the base for these two columns (second row), and plus/minus 18 feet for columns 2 3/4 &amp; 8 1/4 (first row).</x-apple-data-detectors:></x-apple-data-detectors:>
> Exponent's charge locations as shown in our protocol are based on photographs of the charge placements prior to blasting, discussion with PG&E personnel who witnessed placement of the charges, and review of the video coverage of the explosions. We believe that for reasons unknown the blasting subcontractor modified their explosive demolition design subsequent to the preparation of their plan. Based on the totality of the information we have received to date, we believe the charge locations as shown in our protocol are accurate.
> CPUC Response to Exponent's Comment: The attached photograph shows that the second row charges are located at the same elevation as the first row columns. This agrees with your response.
> Exponent is requested to submit additional photographs showing the charge locations for the first and second row columns.
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> A response would be appreciated no later than July 28, 2014.
> Thanks,
> Ron Lok > CPUC
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> ----Original Message----> From: Jacobson, Erik B (RegRel) [mailto:EBJ1@pge.com] > Sent: Saturday, July 19, 2014 10:12 AM > To: Lok, Ronald E. > Cc: Tse, Rick > Subject: Re: Kern Power Plant - Demolition Charge Location Diagrams > Ron. > Please see Exponent's response to your questions below and let me know if you have additional questions. PG&E would be happy to arrange a conference call with Exponent if that would be helpful. > I am out of the office until August 4, checking email occasionally. If you would like to speak by phone, please call my mobile at 415-310-7617. > Best regards, > Erik > \*\*\*\*\*\*\* > Exponent is aware that there are differences between Demtech's Explosive Demolition Plan and our Protocol for Evidence Retrieval. We agree with Mr. Lok that reliable information regarding locations of charges is very important to ensuring the evidence retrieval and storage is done appropriately and can be relied upon by investigators performing root cause analyses. > Please find below specific responses to Mr. Lok's questions. The Exponent diagram shows "kicker" charges, but the Demtech diagram does not show any "kicker" > 1. charges. Additionally, Demtech's "Explosive Demolition Plan" in Item 1.A (Explosive Materials to be Used), does not list a kicker explosive charge to be used. > Exponent's charge locations as shown in our protocol are based on photographs of the charge placements prior to blasting, discussion with PG&E personnel who witnessed placement of the charges, and review of the video coverage of the explosions. We believe that for reasons unknown the blasting subcontractor modified their explosive demolition design subsequent to the preparation of their plan. Based on the totality of the information we have received to date, we believe the charge locations as shown in our protocol are accurate. An LSC (Linear Shape Charge) is shown on column's 5 & 6 (third row) of Demtech's diagram, but missing from Exponent's Diagram. > Exponent's charge locations as shown in our protocol are based on photographs of the charge placements prior to blasting, discussion with PG&E personnel who witnessed placement of the charges, and review of the video coverage of the explosions. We believe that for reasons unknown the blasting subcontractor modified their explosive demolition design subsequent to the preparation of their plan. Columns on lines 5 and 6 are currently

exposed in the post-demolition condition. There is no evidence of linear shape charges on these columns. Based on the totality of the information we have received to date, we believe the charge locations as shown in our protocol are accurate.

> 3. The LSC charges are shown at the top elevation of columns 7-1/8<x-apple-data-detectors://2> and 3-7/8<x-apple-data-detectors://3>(second row) on Exponents Diagram, but shown on the middle (lower) elevation on Demtech's Demo Diagram. Demtech diagram shows these charges to be plus/minus 10 feet from the base for these two columns (second row), and plus/minus 18 feet for columns 2 3/4 & 8 1/4 (first row).

> Exponent's charge locations as shown in our protocol are based on photographs of the charge placements prior to blasting, discussion with PG&E personnel who witnessed placement of the charges, and review of the video coverage of the explosions. We believe that for reasons unknown the blasting subcontractor modified their explosive demolition design subsequent to the preparation of their plan. Based on the totality of the information we have received to date, we believe the charge locations as shown in our protocol are accurate.

> The demolition "charge" location diagrams created by Exponent for the procedure on "Protocol for Evidence Retrieval" and the Demtech's "Explosive Demolition Plan" are not consistent. The differences are noted below and on the at attached diagrams from Exponent and Demtech:

> 1. The Exponent diagram shows "kicker charges, but the Demtech diagram does not show any "kicker" charges. Additionally, Demtech's "Explosive Demolition Plan" in Item 1.A (Explosive Materials to be Used), does not list a kicker explosive charge to be used.

> 2. An LSC (Linear Shape Charge) is shown on column's 5 & 6 (third row) of Demtech's diagram, but missing from Exponent's Diagram.

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> 3. The LSC charges are shown at the top elevation of columns 7-1/8 and 3-7/8 (second row) on Exponents Diagram, but shown on the middle (lower) elevation on Demtech's Demo Diagram. Demtech diagram shows these charges to be plus/minus 10 feet from the base for these two columns (second row), and plus/minus 18 feet for columns  $2\frac{3}{4}$  &  $8\frac{1}{4}$  (first row).

> Please clarify and explain why Exponent's charge location diagram is different from Demtech's. A reliable demolition charge explosive plan is required to ensure that the evidence protocol and Root Cause Analysis reports' are accurate. Therefore, please resolve and reissue any document that may be affected by these changes.

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> If you need further information please advise, otherwise, a response would be appreciated no later than July 28, 2014.

> Thanks,
> Ron Lok
> CPUC
> 415-704-1355
> <Exponent Evidence Retriv Appendix A Sketch.doc> <Demtech Demolition Diagram.pdf>
> PG&E is committed to protecting our customers' privacy.
> To learn more, please visit <a href="http://www.pge.com/about/company/privacy/customer/">http://www.pge.com/about/company/privacy/customer/</a>
> <a href="https://www.pge.com/about/company/privacy/customer/">Kern boiler explosive location photo.doc></a>
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