From:	Redacted			
Sent:	7/22/2013 6:55:06 PM			
To:	rick.tse@cpuc.ca.gov (rick.tse@cpuc.ca.gov)			
Cc:	Redacted			
	Halpin, Ed (/O=PG&E/OU=Corporate/cn=Recipients/cn=E1H8); Allen, Barry			
	(/O=PG&E/OU=Corporate/cn=Recipients/cn=BSA8); Summy, Jeff			
	(/O=PG&E/OU=Corporate/cn=Recipients/cn=J51D); Manheim, William (Law)			
	(/O=PG&E/OU=Corporate/cn=Recipients/cn=WVM3); Jones, Thomas P.			
	(/O=PG&E/OU=Corporate/cn=Recipients/cn=TPJ2)			
Bcc:				

Subject: DCPP Unit 2 Flashover Event

Rick

1) Worker hot-washed 500kV insulators on what piece of equipment? GSU, disconnect, OCB, etc.?

1 - answer) Workers were hot-washing the "dead-end" insulators that provide anchorage of the 500 kV lines to the Diablo Canyon turbine building. See picture. The workers had previously done hotwash of all three phases of the Unit 1 dead end insulators and were completing the last phase of the Unit 2 insulators.

2) On that piece of equipment, how close is the lightning arrester to the insulators? Please provide a picture.

2 - answer) See picture. Dead-end insulators being washed are the horizontal lines at the top of the photo, while the lightning arrestors are the vertical free-standing risers in the center. The closest lighting arrestor in the picture is the one that experienced the flashover. See subsequent pictures for more detailed photo of lightning arrestor.





Lightning Arrestor Upper Voltage Gradient Ring Medium Voltage Gradient Ring

3) Is the washing boom rated for 500kV? If so, how did a flash over occurred?

3 - answer) The boom is designed for the application and was not a factor in the flashover. Based on our initial assessments, the flashover occurred due to a cloud of contaminated water that enveloped the lightning arrestor shortly after initiation of the hotwash of the last dead-end insulator. PG&E is performing a detailed Root Cause Evaluation (RCE) to further flesh out causes and contributing causes of the flashover, as well as corrective actions. We will provide the RCE to the CPUC when it's available.

4) Did anyone get hurt? And did workers followed standard procedure and worn proper PPE?

4 - answer) Nobody was hurt, and workers were wearing proper PPE. Workers were using the standard procedure for hot-washing.

5) Please send us your hot-wash procedure.

5 - answer) Please find attached hotwash procedure.

Redacted

Regulatory Services Manager

Diablo Canyon Power Plant

Redacted

From: Tse, Rick [mailto:rick.tse@cpuc.ca.gov] Sent: Monday, July 15, 2013 7:48 AM To:Redacted Cc: Halpin, Ed; Summy, Jeff; Allen, Barry; Redacted; Jones, Thomas P.; Manheim, William (Law) Subject: RE: DCPP Unit 2 Flashover

Hi Thomas,

Thank you for clarifying. We'd be very interested to hear what you find in your investigation.

Regards,

Rick

From: Redacted
Sent: Friday, July 12, 2013 2:23 PM
To: Tse, Rick
Cc: Halpin, Ed; Summy, Jeff; Allen, Barry; Redacted; Jones, Thomas P.; Manheim, William (Law)
Subject: Re: DCPP Unit 2 Flashover

Rick

We received your request for information below. You can use me as your point of contact for CPUC safety division information requests going forward. I'll provide a response to your questions below when the information is available, which I expect to be midweek next week.

Meanwhile, I do need to provide you with correction to some information you are referring to below.

Our preliminary investigation to date has ruled out any electrical interaction involving the boom. Personnel that observed the event and inspection of the boom confirmed that the boom was not a factor in the event. An additional log entry has been made to our energy trading logs to correct the earlier incorrect information.

NOBODY was hurt in this incident.

Thank you in advance.

Redacted

Regulatory Services Manager

Diablo Canyon Power Plant

Redacted		

From: Halpin, Ed Sent: Friday, July 12, 2013 9:08 AM To: Manheim, William (Law); Redacted ; Jones, Thomas P. Cc: Allen, Barry; Summy, Jeff Subject: Fwd: DCPP Unit 2 Flashover

Can someone weigh in on our protocol for responding to this request for information.

Thanks

Ed

Sent from my iPhone

Begin forwarded message:

From: "Tse, Rick" <<u>rick.tse@cpuc.ca.gov</u>> Date: July 12, 2013, 8:42:20 AM PDT To: "<u>E1H8@pge.com</u>" <<u>E1H8@pge.com</u>> Subject: DCPP Unit 2 Flashover

Hi Ed,

My name is Rick Tse with the PUC's Safety Division. We got your notice on DC's Unit 2. Your report to the ISO says that a boom got too close to the main bank during a hot-wash and flashover to its lightning arrester. This caused a fault which tripped the unit offline. I know your crew is still investigating this, but when info surface, can you provide more details?

1) Worker hot-washed 500kV insulators on what piece of equipment? GSU, disconnect, OCB, etc.?

2) On that piece of equipment, how close is the lightning arrester to the insulators? Please provide a picture.

3) Is the washing boom rated for 500kV? If so, how did a flash over occurred?

4) Did anyone get hurt? And did workers followed standard procedure and worn proper PPE?

5) Please send us your hot-wash procedure.

Thanks,

Rick Tse, PE

(415) 355-5581

PG&E is committed to protecting our customers' privacy. To learn more, please visit <u>http://www.pge.com/about/company/privacy/customer/</u>