

United States  
Nuclear Regulatory Commission



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# Report of Investigation

**SAN ONOFRE NUCLEAR GENERATING STATION,  
UNIT 2:**

**FALSIFICATION OF QUALITY ASSURANCE  
DOCUMENTS AND VERIFICATION OF ALTERNATING  
CURRENT ELECTRICAL CABLES**

Office of Investigations

Reported by OI:RIV

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A-1



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF INVESTIGATIONS FIELD OFFICE, REGION IV  
612 EAST LAMAR BLVD, SUITE 400  
ARLINGTON, TEXAS 76011-4125

September 8, 2010

MEMORANDUM TO: Elmo E. Collins, Regional Administrator  
Region IV

FROM: Crystal D. Holland, Director *CHM*  
Office of Investigations Field Office, Region IV

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2 –  
FALSIFICATION OF QUALITY ASSURANCE DOCUMENTS AND  
VERIFICATION OF ALTERNATING CURRENT ELECTRICAL  
CABLES (CASE NO. 4-2010-016/RIV-2009-A-0177)

Enclosed, for whatever action you deem appropriate, is the Office of Investigations (OI) Report of Investigation concerning the above matter.

Please note that documents may have been gathered during the course of the investigation that are not included in either the report or the exhibits. This additional documentation will be maintained in the OI case file and available for the staff's review upon request.

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Enclosure:

cc w/enclosure:  
R. Zimmerman, OE

cc w/o enclosure:  
C. Scott, OGC  
E. Leeds, NRR (Attn: G. Cwalina, OAC, NRR)

7c

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Distribution:  
s/f (4-2010-016)

c/f  
(b)(7)(C) OI:HQ

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OFFICE	OI:RIV	OI:RIV		
NAME	(b)(7)(C)	CHolland		
DATE	09/09/10	09.08.10		

OFFICIAL RECORD COPY

Title: SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2

FALSIFICATION OF QUALITY ASSURANCE DOCUMENTS AND VERIFICATION  
OF ALTERNATING CURRENT ELECTRICAL CABLES

Licensee:

Southern California Edison Company  
P.O. Box 128  
San Clemente, CA 92674-0128

Case No.: 4-2010-016

Report Date: September 8, 2010

Control Office: OI:RIV

Docket No.: 50-00362

Status: CLOSED

Allegation: RIV-2009-A-0177

Reported by:


Reviewed and Approved by:

7c  
(b)(7)(C)

(b)(7)(C)

Special Agent

Office of Investigations  
Field Office, Region IV

  
Crystal D. Holland, Director *for*  
Office of Investigations  
Field Office, Region IV

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### SYNOPSIS

This investigation was initiated by the U.S Nuclear Regulatory Commission, Office of Investigations, Region IV, on December 21, 2009, to determine whether the printed name of an (b)(7)(C) employed at Southern California Edison's San Onofre Generating Station (SONGS), San Clemente, California, had been deliberately forged on quality assurance (QA) documents to reflect that the QA verification checks had been performed on electrical cords.

Based on the evidence developed during this investigation, the allegation that the printed name of an (b)(7)(C) employed by SONG's had been deliberately forged on QA documents to reflect that the QA verification checks had been performed on electrical cords was not substantiated.

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Case No. 4-2010-016

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**TESTIMONIAL EVIDENCE**

	<u>Exhibit</u>
(b)(7)(C) [Redacted] Bechtel Corporation (Bechtel), San Onofre Nuclear Generating Station (SONGS), San Clemente, California.....	6
(b)(7)(C) [Redacted] Bechtel, SONGS .....	5
(b)(7)(C) [Redacted] Bechtel, SONGS .....	8
(b)(7)(C) [Redacted] Bechtel, SONGS .....	7
(b)(7)(C) [Redacted] Bechtel, SONGS .....	4

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DOCUMENTARY EVIDENCE

Exhibit

Email from

(b)(7)(C)

.....3

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DETAILS OF INVESTIGATION

Applicable Regulations

10 CFR 50 Appendix B, Criterion XVII: (Quality Assurance Records) (2009 Edition)  
(Allegation No. 4)

10 CFR 50.9: (Completeness and accuracy of information) (2009 Edition) (Allegation No. 4)

10 CFR 50.5: (Deliberate misconduct) (2009 Edition) (Allegation No. 4)

Purpose of Investigation

7c This investigation was initiated on by the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations (OI), Region IV (RIV) on December 21, 2009, to determine whether the printed name of (b)(7)(C) Bechtel Corporation (Bechtel), employed at Southern California Edison's (SCE) San Onofre Generating Station (SONGS), San Clemente, California, had been deliberately forged on quality assurance (QA) documents to reflect that the QA verification checks had been performed on electrical cords [Allegation No. RIV-2009-A-0177] (Exhibit 1).

Background

7c On November 30, 2009, (b)(7)(C) Operations Branch, Division of Reactor Safety, NRC, RIV, received an allegation from (b)(7)(C) Bechtel, SONGS, that the printed name of (b)(7)(C) had been forged on QA documents.

7c According to (b)(7)(C) name had been forged on documents to reflect that the 120 volt AC [alternating current] and 240 volt AC electrical cables had been verified and the QA checks completed. (b)(7)(C) advised that he asked (b)(7)(C) whether or not she had signed the QA documents and she allegedly responded that she had not. (b)(7)(C) related that (b)(7)(C) printed name had been forged "at least ten times." The cables were allegedly used in conjunction with safety related work in the Unit 2 tendon gallery. (b)(7)(C) indicated that he had previously observed poorly checked electrical cable failures while working in the tendon gallery approximately 3 weeks prior to the discovery of the falsified signatures.

7c On December 17, 2009, a RIV Allegation Review Board met to discuss (b)(7)(C) allegations and requested that OI initiate an investigation to determine if (b)(7)(C) printed (b)(7)(C) had been deliberately forged on the QA documents to reflect that the QA verification checks had been performed. The NRC technical point of contact is (b)(7)(C) (b)(7)(C) Division of Reactor Projects, RIV (Exhibit 2).

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Coordination with NRC Staff

On March 25, 2010, OI:RIV met with (b)(7)(C) NRC, RIV, assigned to SONGS, and tasked him to identify electrical cords through a representational review of documents dated (b)(7)(C) (Exhibit 3); specifically, where (b)(7)(C) name appeared at least ten times in a row on a designated form. On April 16, 2010, (b)(7)(C) advised that after conducting his review, he could only identify documentation where (b)(7)(C) name appeared at least ten times on one form (b)(7)(C) but the dates of his review were from (b)(7)(C) as documentation for (b)(7)(C) could not be located (Exhibit 3, pp. 9-10).

Allegation No. 4: Deliberate Falsification of Printed Name on Quality Assurance Document

Agent's Analysis

This investigation was initiated to determine if (b)(7)(C) printed name had been deliberately forged on the QA documents to reflect that the QA verification checks had been performed on electrical cords.

During the interview of (b)(7)(C) by OI:RIV, he advised that on approximately (b)(7)(C) during the course of conducting inspections on electrical cables to verify that 120 and 240 volt AC electrical cables were properly inspected by Bechtel electricians, he identified what he determined were falsifications of (b)(7)(C) name approximately ten times in a row on one document (NFI) during a peer check. (b)(7)(C) advised that he brought the document to (b)(7)(C) for her review, and she confirmed that her hand printed name on the document was not her handwriting. (b)(7)(C) related that he was performing his peer check during the replacement of the steam generator and was located at the main missile hatch door where the concrete had been chipped away in order to remove the steam generator. (b)(7)(C) advised that the document in question would have been kept inside of the Bechtel conex boxes on the south side of Unit 3 in a folder marked "electrical checking" that housed other Bechtel equipment. (b)(7)(C) was not aware of the present location of the document, but advised that it would have (b)(7)(C) hand printed name and his personal signature by her name (Exhibit 4, pp. 9-12, 25-28).

AGENT'S NOTE: Bechtel Corporation lost their contract with SONGS in early 2009 and has been replaced by WD Associates

(b)(7)(C) was interviewed by OI:RIV and confirmed that she had not written the name on the document presented to her by (b)(7)(C) added that the document also did not contain her badge number and that it appeared her printed name had been falsified on the document. Additionally, (b)(7)(C) advised that the document in question contained the names of two other Bechtel (b)(7)(C) and (b)(7)(C) both of whom she had inspected electrical cords with prior to the (b)(7)(C) (b)(7)(C) advised that she was off (b)(7)(C) [referring to a datebook she still had in her possession that still contained her previous schedule]. (b)(7)(C) was shown a copy of Exhibit 3, pp. 9-10 as a comparison of the falsified document in question with her name printed 12 times (b)(7)(C) and confirmed that the handwriting contained on this document [Exhibit 3, pp. 9 and 10] from (b)(7)(C) were all her personal handwriting. (b)(7)(C) did

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7c not have any knowledge of where the document that had her falsified printed name on it was located, but advised that she recalled that the documents were kept in the Bechtel conex box. (b)(7)(C) recalled mainly working with (b)(7)(C) and (b)(7)(C) during the time period in question, when the 120 volt household electrical cords were being checked, and opined that the sheet could have gotten lost and they (b)(7)(C) and (b)(7)(C) would have rewritten the sheet. (b)(7)(C) said she discussing this incident and her concerns with her Bechtel (b)(7)(C) (b)(7)(C) and recalled him (b)(7)(C) telling her not to "worry about it" as they were doing things differently now (Exhibit 5, pp. 5-9, 14-17, 24-26).

7c (b)(7)(C) was interviewed by OI:RIV regarding a document [copy of Exhibit 3, pp. 9-10] and advised that the forms for recording the electrical cord inspections had changed from the initial startup to the documents being presently shown to him. (b)(7)(C) advised that the names [of the individuals performing inspections] were transferred over from the old document to a new form. (b)(7)(C) explained that nobody falsified their actual signatures; they just transferred the Bechtel employee's printed name from one document to another [as with (b)(7)(C) name]. However, (b)(7)(C) did not recall (b)(7)(C) approaching him regarding the document in question with a concern that her name had been falsified. (b)(7)(C) said if (b)(7)(C) had that concern, he was sure that he would have verified it and then had it transferred over to the new form. (b)(7)(C) advised that he gave instructions to Bechtel employees to transfer information over from one document to another, and when questioned as to whether or not he gave instructions to (b)(7)(C) and (b)(7)(C) he specifically recalled instructing them to move the information over to another sheet. (b)(7)(C) stated that he never tasked (b)(7)(C) and (b)(7)(C) to falsify anything or to not inspect [the electrical cords], but once the electrical cords had been inspected, the data on that inspection sheet could be transferred to the proper form in use at the time. (b)(7)(C) advised that he was concerned with safety, and would never have instructed someone to falsify a document and allow someone to get hurt. (b)(7)(C) advised that the first forms were logs that the employees made themselves by drawing some lines on a piece of paper, and then later they were given a specific form [provided by SONGS] with descriptions and names. (b)(7)(C) advised that, initially, the procedure for conducting inspections as identified by SONGS was not very good, but later the procedure changed and became more professional and meticulous. (b)(7)(C) advised that all the forms (b)(7)(C) completed in the initial inspections of the electrical cords were probably transferred over to the new form (Exhibit 6, pp. 9-16, 17-18, 23).

7c (b)(7)(C) was interviewed by OI:RIV and advised that the verification of the 120 and 240 volt AC electrical cords started a little before (b)(7)(C). She recalled that SONGS had a problem a week earlier when the electrical cords in the gallery had the hot wire switched with the ground wire. (b)(7)(C) recalled that during the first day of inspections, she simply used a piece of typing paper and wrote down the type of electrical cords and who had checked and inspected the cords. (b)(7)(C) said there was a two person verification process. (b)(7)(C) was shown a copy of Exhibit 3, pp. 9-10, and related that this form was the third form that they used because security was verifying the form. (b)(7)(C) advised that there was no falsification of the actual forms and confirmed that she witnessed (b)(7)(C) transfer (b)(7)(C) information [previously inspected electrical cables] from one form to the more official form, but could not recall any detailed information (Exhibit 7, pp. 7-14).

7c During his interview with OI:RIV, (b)(7)(C) reviewed Exhibit 3, pp. 9-10 and advised that this particular form was not used until the end of the inspection process as it contained numerous data fields (i.e. security tag number, description of cord, inspected by name/badge number,

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7c verified by name/badge number, security officer, date), and was not the form that he started out using. (b)(7)(C) related that Bechtel employees had been directed to take the electrical cord caps apart and verify the polarity was correct and connections tight. (b)(7)(C) advised there was a sense of urgency as some electrical cords had been found to be improperly wired, and it was not known if it had been a malicious act or an accident. (b)(7)(C) advised that the inspections were trying to eliminate the possibility of personal injury to any individuals that could result from improperly wired electrical cords. (b)(7)(C) recalled that, initially, (b)(7)(C) the inspections were performed in a haphazard way, were recorded on a sheet of paper with no specific form used and had very few data fields (i.e. name, number on the cord). (b)(7)(C) said these forms were turned into the (b)(7)(C) (b)(7)(C) related that as new forms were developed, he questioned the process with (b)(7)(C) regarding how to handle electrical cords that had been previously inspected. (b)(7)(C) recalled being instructed by (b)(7)(C) to transfer the information from the old form [previous inspected electrical cords] to the new forms. (b)(7)(C) advised that he was the one responsible for writing (b)(7)(C) name on the new form when he transferred the data over. (b)(7)(C) indicated that he did not try to copy (b)(7)(C) hand writing in any way, but was only trying to keep track of electrical cords that had been inspected. (b)(7)(C) advised that he had previously worked with (b)(7)(C) during the inspection of electrical cords and could verify that the inspections had been properly completed. (b)(7)(C) advised that the reason for the re-inspections was due to a second electrical cord being found to be improperly wired and SONGS security got involved and required all of the previous inspections to be redone. (b)(7)(C) related that once he transferred the information using (b)(7)(C) name to the new form, the old form was most likely discarded. (b)(7)(C) advised he had no ill intent when he transferred the information from (b)(7)(C) form to the new form, and did not falsify any information (Exhibit 8, pp. 11-17, 19-24, 26-29, 32-35).

7c In summary, this investigation determined that (b)(7)(C) was responsible for transferring the data and (b)(7)(C) name to the new forms, but he did so at the direction of (b)(7)(C) and with no intent to falsify any documentation. The inspection of the electrical cords was an evolving process, and as forms were being devised, it entailed the transfer of the data.

Conclusions

Based on the evidence developed during this investigation, the allegation that the printed name (b)(7)(C) had been deliberately forged on QA documents to reflect that the QA verification checks had been performed on electrical cords was not substantiated.

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LIST OF EXHIBITS

Exhibit

No.

Description

- 1 Investigation Status Record, dated December 21, 2009 (1 page).
- 2 Branch Evaluation, Plan, & Recommendation, dated December 15, 2009 (11 pages).
- 3 Email from (b)(7)(C) (10 pages).
- 4 Transcript of Interview with (b)(7)(C) dated January 14, 2010 (46 pages).
- 5 Transcript of Interview with (b)(7)(C) dated April 20, 2010 (32 pages).
- 6 Transcript of Interview with (b)(7)(C) dated April 20, 2010 (25 pages).
- 7 Transcript of Interview with (b)(7)(C) dated May 19, 2010 (19 pages).
- 8 Transcript of Interview with (b)(7)(C) dated May 19, 2010 (40 pages).

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