

United States  
Nuclear Regulatory Commission



# Report of Investigation

SAN ONOFRE NUCLEAR GENERATING STATION,  
UNIT 2:

FAILURE BY (b)(7)(C) TO PERFORM  
A PROCEDURALLY REQUIRED WALK-DOWN OR  
REVIEW OF TAGOUT BOUNDARY

Office of Investigations

Reported by OI:RIV

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

March 4, 2011

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

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

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2 –  
FAILURE BY A (b)(7)(C) TO PERFORM A  
PROCEDURALLY REQUIRED WALK DOWN OR REVIEW OR TAG  
OUT BOUNDARY (CASE NO. 4-2010-060/RIV-2010-A-0079)

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: L. James, OAC, NRR)

7c

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Distribution:  
s/f (4-2010-060)  
c/f  
(b)(7)(C) OI:HQ

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DATE	03/03/11	03/04/2011		

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Title: SAN ONOFRE 2

FAILURE BY A (b)(7)(C) TO PERFORM A PROCEDURALLY REQUIRED  
WALK-DOWN OR REVIEW OF TAGOUT BOUNDARY

Licensee:

Southern California Edison  
2244 Walnut Grove Avenue  
Rosemead, CA 91770

Docket No.: 05000361

Allegation No.: RIV-2010-A-0079

Case No.: 4-2010-060

Report Date: March 4, 2011

Control Office: OI:RIV

Status: CLOSED

Reported by:

(b)(7)(C)

(b)(7)(C)

Special Agent

Office of Investigations  
Field Office, Region III

Reviewed and Approved by:

*Crystal Holland*

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

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### SYNOPSIS

This investigation was initiated on June 9, 2010 by the U.S. Nuclear Regulatory Commission, Office of Investigations, Region IV, to determine whether a (b)(7)(C) at Southern California Edison's San Onofre Nuclear Generating Station (SONGS) willfully failed to conduct a procedurally required walk-down or a review of the tagout boundary while working under a Work Control Authorization.

Based on the evidence developed, the allegation that a (b)(7)(C) at SONGS willfully failed to conduct a procedurally required walk-down or a review of the tagout boundary while working under a Work Control Authorization was not substantiated.

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Case No. 4-2010-060

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Case No. 4-2010-060

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TESTMONIAL EVIDENCE

Exhibit

(b)(7)(C)	
San Onofre Nuclear Generating Station (SONGS).....	9
(b)(7)(C)	
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DOCUMENTARY EVIDENCE

Exhibit

Section 6.3.5.3 of Work Process Procedure SO123-XX-5.1, Revision 18,  
dated October 16, 2009 ..... 4

Attachment 2 of Work Process Procedure SO123-XX-5.1, Revision 18,  
dated October 16, 2009 ..... 5

Notification [REDACTED] (b)(7)(C) ..... 6

[REDACTED] Notification (b)(7)(C) ..... 7

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DETAILS OF INVESTIGATION

Applicable Regulations

Technical Specification 5.5.1.1.a

Regulatory Guide 1.33, Revision 2, Appendix A, Quality Assurance Program Requirements

10 CFR 50.5, Deliberate Misconduct (2009 Edition)

Purpose of Investigation

7c This investigation was initiated on June 9, 2010 by the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations (OI), Region IV (RIV), to determine whether (b)(7)(C) at Southern California Edison's (SCE) San Onofre Nuclear Generating Station (SONGS), willfully failed to conduct a procedurally required walk-down or a review of the tagout boundary in the Unit 2 turbine building while working under a Work Control Authorization (WCA)[Allegation No. RIV-2010-A-0079](Exhibit 1).

Background

7c On April 29, 2010, SCE notified NRC:RIV of potential willful misconduct by a (b)(7)(C) (b)(7)(C) for failing to complete a walk-down or review of the tagout boundary while working under a WCA. According to SCE, on or about (b)(7)(C) (b)(7)(C) signed on to the WCA. According to SONGS' Procedure S0123-XX-5.1, (b)(7)(C) was then required to conduct a walk-down or a review of the tagout boundary, which he failed to perform. (b)(7)(C) failure to conduct the required walk-down resulted in a breach of a pressurized instrument air line in the Unit 2 turbine building.

During the event review, the licensee became aware of (b)(7)(C) failure to perform a walk-down and completed a "willful violation assessment" of the issue. It was subsequently determined that (b)(7)(C) actions were a "deliberate noncompliance" of an NRC requirement. SONGS documented the incident in Nuclear Notification (b)(7)(C)

On June 8, 2010, the RIV Allegation Review Board (ARB) convened to discuss the information provided by SONGS. The ARB requested that OI:RIV initiate an investigation to determine if (b)(7)(C) willfully failed to conduct the procedurally required walk-down or a review of the tagout boundary (Exhibit 2).

Agent's Analysis

7c This investigation was tasked with determining whether an (b)(7)(C) (b)(7)(C) willfully failed to perform a procedurally required walk-down or review of a tagout boundary (Exhibit 1; Exhibit 2). This event actually occurred on (b)(7)(C) inside the SONGS' Unit 2 turbine building when the plant was engaged in a refueling outage (Exhibit 3, p. 33; Exhibit 7, p. 10). At that time, a modification to the instrument air system was in progress to replace a copper line with stainless steel. Specifically, a branch line was to be isolated, cut off from the old line and connected to the new stainless steel line (Exhibit 7, p. 9). According to

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7c Section 6.3.5.3 of Work Process Procedure SO123-XX-5.1, titled, "Work Clearance Management Issue, Release and Tagging Modifications," Revision 18, the "Work Authorization Holder" (WAH) is responsible for ensuring the tagout boundary is adequate for team members' safety prior to starting the work activity (Exhibit 4). A walk-down would have accomplished this requirement since its purpose was to verify a safe work boundary (Exhibit 5). Under this particular section, (b)(7)(C) was responsible for performing this action since he was the WAH who had signed on to the WCA. The subsequent failure to verify a safe work boundary is significant because while installing the instrument air modifications, a welder cut into the pressurized air line.

AGENT'S NOTE: In a memorandum to file, dated May 26, 2010, RIV staff indicated that this incident was determined not to be a violation of NRC requirements because it occurred on a non-safety related system and had no actual consequence on plant operations (Exhibit 2, p. 6).

7c The licensee investigated the event under Notification Number (b)(7)(C) (b)(7)(C) (Exhibit 6). (b)(7)(C) SONGS (b)(7)(C) (b)(7)(C) was tasked with determining whether this event involving (b)(7)(C) was a "Category 1" noncompliance. In her OI interview, (b)(7)(C) explained that pursuant to the NRC Confirmatory Order, a Noncompliance Review Panel (NRP) is normally convened after a "prompt investigation" reveals a "potential deliberate violation of site or NRC requirements." According to (b)(7)(C) information from the prompt investigation is obtained by the appropriate supervisors and/or managers and is provided to the NRP. (b)(7)(C) recalled the notification associated with the event and added that the questions on pages 6 and 7 of the document were answered by others not affiliated with the NRP (Exhibit 6, pp. 6-11; Exhibit 8, pp. 6, 8-17). (b)(7)(C) stated that the panel determined that based on the prompt investigation and the Root Cause Evaluation there was deliberate noncompliance with an NRC requirement. Specifically, the panel's decision was based on (b)(7)(C) being aware of the requirement and choosing to ignore the procedure because he was "too busy" at the time. (b)(7)(C) acknowledged that (b)(7)(C) was never interviewed by her or anyone else on the NRP, and she cautioned that this determination was not the equivalent of a willful misconduct call by the NRC. (b)(7)(C) related that the purpose of the exercise is to bring to the NRC's attention an event at the site that is potentially willful (Exhibit 8, pp. 14-20).

7c AGENT'S NOTE: A review of Notification (b)(7)(C) revealed that the elements leading to the NRP's conclusion about (b)(7)(C) consisted of (b)(7)(C) answers to basic template questions concerning his knowledge and understanding of procedure requirements. However, the NRP did not consider mitigating circumstances which may have been identified during a thorough interview with the subject (Exhibit 6, pp. 6-11; Exhibit 8, p. 18).

7c In his OI interview, (b)(7)(C) related that in (b)(7)(C) he was a (b)(7)(C) in charge of (b)(7)(C) on the (b)(7)(C) and had been in that position for about (b)(7)(C) recalled that he (b)(7)(C) According to (b)(7)(C) this involved severing an existing copper line that was "tied-in" to the pressurized line and replacing it with another instrument air line. (b)(7)(C) described the entire process as "a new experience" since he and (b)(7)(C) normally had not worked on

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pressurized lines previously. On November 8, 2009, (b)(7)(C) was directed to double check and make sure that plant operations had given work clearance for a particular line. A "clearance" in this case is described as the main valves being closed off so that maintenance work could be done. (b)(7)(C) stated that he checked the computer and verified that a clearance was in place. (b)(7)(C) recalled that he was asked to do this because (b)(7)(C) was not familiar with the process. (b)(7)(C) explained that on the morning of (b)(7)(C) he was given his turnover from his supervisor, (b)(7)(C) and was (b)(7)(C) people on (b)(7)(C). (b)(7)(C) added that priorities dictated that certain activities needed to be completed within a time window in addition to various other tasks. (b)(7)(C) recalled that in the middle of his pre-job briefing with (b)(7)(C) another worker, (b)(7)(C) needed clearances for five more work packages. Each work package was assigned to a different pipe in the system. While (b)(7)(C) obtained clearances for each of the work activities, he admitted that he failed to issue (b)(7)(C) the walk-down forms that accompany the clearances. These forms, according to (b)(7)(C) outline the boundaries for the work activity. These areas needed to be walked down prior to any work being conducted to ensure that it was safe. (b)(7)(C) contended that he knew that these areas needed to be walked down but he neglected to print out the walk-down sheets. (b)(7)(C) blamed this on being unfamiliar with the new computer system (Exhibit 3, pp. 3-19, 33). (b)(7)(C) corroborated (b)(7)(C) testimony, stating that the computer software used during the outage was new, and that the (b)(7)(C) were very busy at the time (Exhibit 9, pp. 10-13).

(b)(7)(C) acknowledged that he signed on to the WCA and explained that it involved choosing among a computerized list of work orders having clearances and "clicking" on the proper order. Once the work order is chosen, the user is "signed on" to the WCA. According to (b)(7)(C) by signing on to the WCA, he becomes responsible for the safety of (b)(7)(C). (b)(7)(C) added that this included making sure (b)(7)(C) have an adequate boundary to work by walking down that area and ensuring that the valves are properly tagged (Exhibit 3, pp. 19-21). This is consistent with the aforementioned Work Process Procedure which defines a walk-down as: 1) "Picking up the Equipment Status List from Operations on the WCA . . . of the items cleared;" 2) "Ensuring boundaries are sufficient for the work being done," and; 3) "Walking down all applicable items on the Equipment Status list, checking the tags and ensuring the proper position of the items, and ensuring barricades, barrier tape, or warning blocks are properly used" (Exhibit 5). (b)(7)(C) initially claimed that he (b)(7)(C) but reneged upon further questioning and admitted that he failed to communicate this request to him. (b)(7)(C) added that he did not provide the walk-down sheets to (b)(7)(C) anyway, so (b)(7)(C) did not have the listed boundaries in his possession. (b)(7)(C) stated that plant operations outline the valves and circuit breakers for each work order, and these are what needed to be reviewed. (b)(7)(C) indicated that he was familiar with the site procedures associated with walk-downs and understood that the procedure was applicable under the circumstances. However, (b)(7)(C) contended that he was "overwhelmed" with the multiple tasks and priorities that he neglected to perform the walk-down. The thought of conducting a walk-down or even (b)(7)(C) never occurred to him. When asked, (b)(7)(C) argued that it was a responsibility he overlooked, and it was not something he simply shrugged off (Exhibit 3, pp. 20-31).

Given the evidence in this case, (b)(7)(C) violated the site procedure in that, as the one signing on to the WCA, he was responsible for ensuring a safe work boundary, and this would be accomplished by conducting a walk-down of the area. Although (b)(7)(C) failed to perform this walk-down, his mindset precluded willful misconduct. (b)(7)(C) was clear in his testimony that the

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7c process involved in "tie in" work was a new experience for him and (b)(7)(C) and he was not familiar with the computer system involved in the process. (b)(7)(C) stated that because of his unfamiliarity with the computer, he did not print out the walk-down sheets. This did not help in reminding him of the walk-down or in (b)(7)(C). According to (b)(7)(C) he was overwhelmed with competing tasks and the thought of conducting the walk-down did not occur to him at the time. This would constitute negligence arising from forgetfulness and distraction. Because these factors are not elements of willfulness, the allegation that (b)(7)(C) willfully failed to conduct the walk-down is not substantiated.

Conclusion

7c Based on the evidence developed, the allegation that a (b)(7)(C) at SONGS willfully failed to conduct a procedurally required walk-down or a review of the tagout boundary while working under a Work Control Authorization was not substantiated.

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LIST OF EXHIBITS

Exhibit

No.

Description

- 1 Investigation Status Record, OI Case 4-2010-060, dated June 9, 2010 (1 page).
- 2 ARB Summary and related follow-up, dated June 8, 2010 (9 pages).
- 3 Transcript of Interview with (b)(7)(C) dated August 31, 2010 (48 pages).
- 4 Section 6.3.5.3 of Work Process Procedure SO123-XX-5.1, Revision 18, dated October 16, 2009 (1 page).
- 5 Attachment 2 of Work Process Procedure SO123-XX-5.1, Revision 18, dated October 16, 2009 (1 page).
- 6 Notification (b)(7)(C) (11 pages).
- 7 Notification (b)(7)(C) (12 pages).
- 8 Transcript of Interview with (b)(7)(C) dated January 19, 2011 (24 pages).
- 9 Transcript of Interview with (b)(7)(C) dated January 19, 2011 (20 pages).

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