



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

May 8, 2009

Mr. Eric McCartney
Vice President
Carolina Power and Light Company
H.B. Robinson Steam Electric Plant Unit 2
3581 West Entrance Road
Hartsville, SC 29550

SUBJECT: H.B. ROBINSON STEAM ELECTRIC PLANT - NRC INTEGRATED
INSPECTION REPORT 05000261/2009002 ERRATA

Dear Mr. McCartney:

On April 30, 2009, the US Nuclear Regulatory Commission (NRC) issued the subject inspection report for the H.B. Robinson Steam Electric Plant, ADAMS accession ML091200745. In reviewing this report, it was noted that we inadvertently omitted the Operator Licensing Annual Review in section 4OA2. Accordingly, we are providing a revised version of Inspection Report 05000261/2009002 that documents the above change.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> <http://www.nrc.gov/NRC/ADAMS/index.html>. (The Public Electronic Reading Room).

I apologize for any inconvenience this error may have caused. If you have any questions, please contact me at (404) 562-4603.

Sincerely,

/GJW RA for/

Randall A. Musser, Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket No.: 50-261
License No.: DPR-23

Enclosure: Inspection Report 05000261/2009002
w/Attachment: Supplemental Information

cc w/encls: See page 2

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REPORT 05000261/2009002 ERRATA

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SIGNATURE	RFA /RA/	JGW /RA/	RXM /RA/				
NAME	R. Aiello	J.Worosilo	RMusser				
DATE	05/08/2009	05/08/2009	05/08/2009				
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Letter to Eric McCartney from Randall Musser dated May 8, 2009

SUBJECT: H.B. ROBINSON STEAM ELECTRIC PLANT - NRC INTEGRATED
INSPECTION REPORT 05000261/2009002

Distribution w/encl:

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L. Slack, RII

OE Mail

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RidsNrrPMRobinson Resource

- identification of corrective actions which were appropriately focused to correct the problem; and
- completion of corrective actions in a timely manner.

The inspectors also reviewed these AR's to verify compliance with the requirements of the CAP as delineated in Procedure CAP-NGGC-0200, Corrective Action Program, and 10 CFR 50, Appendix B. Documents reviewed are listed in the Attachment.

b. Observations and Findings

No findings of significance were identified.

.3 Annual Sample Review

a. Inspection Scope

The inspectors selected NCR 00323224, Psychometric Flaws Found on Written Exams, to verify that the NCR correctly described an issue related to biennial written examinations. The inspectors conducted this review during the Biennial Licensed Operator Requalification Inspection, which was conducted during the week of March 2, 2009. The NCR was initiated because two biennial examinations (one from the 2007 requalification examination and one from the 2009) were very close to being non-discriminatory (Level Of Difficulty of 1) due to a significant number of psychometric flaws. TAP 403, Examination and Testing, Rev. 31 stated in Section 8.2.8 – 8.2.9, that "Examination questions should be designed to solicit one correct answer." It further stated that "When generating the question stem, ensure additional information provided does not make more than one distracter correct. As part of the review, psychometric flaws should be identified." The inspectors verified this issue had been completely and accurately identified in the licensee's Corrective Action Program via NCR 00323224. Additionally, the inspectors verified that the individuals who received these low discriminatory exams scored high enough to remove any doubt whether or not they were safe operators. Corrective actions have not been verified complete because the licensee had not yet completed an apparent cause evaluation.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

(Closed) LER 2009-008-02, Manual Reactor Trip Due to High Turbine Vibrations.

a. Inspection Scope

This Licensee Event Report (LER) describes the reactor trip that was previously documented in section 4OA3 of NRC inspection report 05000261/2008005. The inspectors reviewed this LER and related documents to assess the LER's accuracy,

appropriateness of the corrective actions, potential violation of NRC requirements, and generic issues. Documents reviewed are listed in the attachment.

b. Findings

Introduction: The inspectors identified a Green finding for the licensee's failure to provide adequate procedures for maintenance and installation of the main generator and exciter. Consequently, while completing associated maintenance and installation work, licensee personnel incorrectly installed shims under the exciter base and incorrectly installed a refurbished seal on the generator. As a result, the exciter experienced high vibrations on November 17, 2008, which required the insertion of a manual turbine and reactor trip. Although a violation of regulatory requirements was not identified, this failure was a performance deficiency with respect to the licensee's corporate policy NGGD-0010, "Nuclear Generation Group Policy for a Strong Safety Culture", Revision 0.

Description: The licensee's failure to provide adequate procedures for maintenance and installation of the main generator and exciter was a performance deficiency that allowed maintenance technicians to create conditions that allowed high turbine vibration, which in turn prompted control-room operators on November 17, 2008, to initiate a manual reactor trip. Specifically, the subject procedures did not adequately describe proper installation of shims under the exciter base, and that inadequacy allowed maintenance technicians to improperly install shims in at least two locations, such that the exciter frame under the #9 bearing was inadequately supported. Also, the procedures did not require independent verification of critical dimensions associated with hydrogen seal clearances, and that inadequacy allowed maintenance technicians to incorrectly install a hydrogen seal and for their error to not be discovered before that seal was placed into service. Consequently, a hydrogen seal rub contributed to high turbine vibration.

This failure was a performance deficiency with respect to the licensee's corporate policy NGGD-0010, Nuclear Generation Group Policy for a Strong Safety Culture, Revision 0, in that policy NGGD-0010 requires managers and supervisors to ensure that procedures are adequate to assure nuclear safety. However, the procedures for maintenance and installation of the main generator and exciter were not adequate to assure nuclear safety, in that inadequacies in those procedures allowed maintenance and installation activities to produce conditions which resulted in a reactor trip.

Analysis: The performance deficiency was the licensee's failure to provide adequate procedures for maintenance and installation of the main generator and exciter. This finding is more-than-minor because it affected the Equipment Performance attribute of the Initiating Events cornerstone, and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability during power operations. When evaluated per Attachment 4 of Manual Chapter 0609, this finding screened to very low safety significance (Green) because it did not contribute to both an initiating event and the likelihood of a loss of mitigating equipment or functions. This finding is in the licensee's corrective action program as a contributing cause identified in AR 306903. This finding has a cross-cutting aspect of supervisory and management oversight, as described in the Work Practices component of the Human Performance cross cutting

Enclosure

area because the licensee failed to provide adequate oversight to the work activities associated with turbine-generator reassembly (H.4(c)).

Enforcement: Enforcement action does not apply because the performance deficiency did not involve a violation of regulatory requirements. Because this finding does not involve a violation of regulatory requirements and has a very low safety significance, it is characterized as a finding and is designated FIN 05000261/2009002-03, "Inadequate procedures produced conditions which caused a reactor trip".

4OA5 Other Activities

.1 Quarterly Resident Inspector Observations of Security Personnel and Activities

a. Inspection Scope

During the inspection period, the inspectors observed Security force personnel and activities to ensure that the activities were consistent with licensee security procedures and regulatory requirements relating to nuclear plant security. These observations took place during both normal and off-normal plant working hours.

These quarterly resident inspector observations of security force personnel and activities did not constitute any additional inspection samples. Rather, they were considered an integral part of the inspectors' normal plant status review and inspection activities.

b. Findings

No findings of significance were identified.

.2 (Closed) Temporary Instruction (TI) 2515/176, EDG TS Surveillance Requirements Regarding Endurance and Margin Testing

Inspection activities for TI 2515/176 were previously completed and documented in inspection report 05000261/2008004 and this TI is considered closed at H.B. Robinson Steam Electric Plant; however, TI 2515/176 will not expire until August 31, 2009. The information gathered while completing this temporary instruction was forwarded to the Office of Nuclear Reactor Regulation for review and evaluation.

4OA6 Meetings, Including Exit

On January 16, 2009, the inspectors discussed results of the onsite radiation protection inspection with Mr. E. McCartney, Site Vice President, and other responsible staff. The inspectors noted that proprietary information was reviewed during the course of the inspection but would not be included in the documented report.

An exit meeting was conducted on March 5, 2009, to discuss the findings of the Licensed Operator Requalification program inspection. The inspectors confirmed that no proprietary information was retained during this inspection.

Enclosure

On April 3, 2009, the resident inspectors presented the inspection results to Mr. Eric McCartney and other members of his staff. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

- identification of corrective actions which were appropriately focused to correct the problem; and
- completion of corrective actions in a timely manner.

The inspectors also reviewed these AR's to verify compliance with the requirements of the CAP as delineated in Procedure CAP-NGGC-0200, Corrective Action Program, and 10 CFR 50, Appendix B. Documents reviewed are listed in the Attachment.

b. Observations and Findings

No findings of significance were identified.

4OA3 Event Follow-up

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This Licensee Event Report (LER) describes the reactor trip that was previously documented in section 4OA3 of NRC inspection report 05000261/2008005. The inspectors reviewed this LER and related documents to assess the LER's accuracy, appropriateness of the corrective actions, potential violation of NRC requirements, and generic issues. Documents reviewed are listed in the attachment.

b. Findings

Introduction: The inspectors identified a Green finding for the licensee's failure to provide adequate procedures for maintenance and installation of the main generator and exciter. Consequently, while completing associated maintenance and installation work, licensee personnel incorrectly installed shims under the exciter base and incorrectly installed a refurbished seal on the generator. As a result, the exciter experienced high vibrations on November 17, 2008, which required the insertion of a manual turbine and reactor trip. Although a violation of regulatory requirements was not identified, this failure was a performance deficiency with respect to the licensee's corporate policy NGGD-0010, "Nuclear Generation Group Policy for a Strong Safety Culture", Revision 0.

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Analysis: The performance deficiency was the licensee's failure to provide adequate procedures for maintenance and installation of the main generator and exciter. This finding is more-than-minor because it affected the Equipment Performance attribute of the Initiating Events cornerstone, and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability during power operations. When evaluated per Attachment 4 of Manual Chapter 0609, this finding screened to very low safety significance (Green) because it did not contribute to both an initiating event and the likelihood of a loss of mitigating equipment or functions. This finding is in the licensee's corrective action program as a contributing cause identified in AR 306903. This finding has a cross-cutting aspect of supervisory and management oversight, as described in the Work Practices component of the Human Performance cross cutting area because the licensee failed to provide adequate oversight to the work activities associated with turbine-generator reassembly (H.4(c)).

Enforcement: Enforcement action does not apply because the performance deficiency did not involve a violation of regulatory requirements. Because this finding does not involve a violation of regulatory requirements and has a very low safety significance, it is characterized as a finding and is designated FIN 05000261/2009002-03, "Inadequate procedures produced conditions which caused a reactor trip".

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