



**The Shaw Group Inc.**  
128 South Tryon Street, Suite 400  
Charlotte, NC 28202  
704-331-5856  
FAX: 225-987-3970

David P. Barry  
President, Nuclear Division of the Power Group

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U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

SSW-NRC-00002

**SUBJECT: SHAW REPLY TO NRC NOTICE OF NONCONFORMANCE**

Attached is the Shaw reply to NRC letter dated June 23, 2010 regarding Shaw Nuclear Services responses to NRC Inspection Report No. 99901387/2010-201. We have evaluated the following and provided further clarifying information in Enclosures 1 through 3, respectively.

Nonconformance:	99901387/2010-201-02
	99901387/2010-201-05
	99901387/2010-201-06

We trust you will find this information satisfactory. Should you have any questions, please contact:

Mr. John Oddo at 617 589 8236 or [john.oddo@shawgrp.com](mailto:john.oddo@shawgrp.com)

Very truly yours,

David Barry  
President  
Shaw Nuclear Services

cc: Chief  
Quality and Vendor Branch 1  
Division of Construction Inspection and Operational Programs  
Office of New Reactors  
Kerri Kavanagh USNRC

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**ENCLOSURE ONE**

**REPLY TO NON 99901387/2010-201-02**

**NONCONFORMANCE**

NON 99901387/2010-201-02 states that "Shaw did not utilize the design change process to obtain prior Westinghouse approval for the use of different revisions of the industry standards and the regulatory guide in Design Specification APP-CC01-ZO-026, "Safety-Related Mixing and Delivering Concrete," Revision 2, Design Specification APP-CC01-ZO-027, "Safety-Related Concrete Testing Services," Revision 1, and Calculation APP-G1-EWC-002, "Calculation, Development of Power Cable Ampacities," Revision 1. In addition, Shaw did not specify the correct revisions or editions of industry standards and a regulatory guide in the design documents above."

Your response did not provide sufficient information in the following areas:

- a) Shaw did not provide a reason for the noncompliance;

RESPONSE: The reason for the noncompliance was the assumption by the preparer and reviewer of the specifications that the DCP to revise the Codes and Standards document would be prepared by other engineers on the project. No verification follow-up was performed.

- b) Shaw indicated that a Design Change was initiated for CAR 2010-03-04-464 but was silent on a design change proposal for CAR 2010-03-05-471;

RESPONSE: Shaw's corrective action for CAR 2010-03-05-471 did not require a DCP to the Design Basis, it was determined that the engineering documents referenced in CAR 2010-03-05-471, will be revised to meet the specified design basis. The revisions to the specifications will be complete by 8/31/10

- c) Shaw issued an immediate notification to the engineering staff to reinforce adherence to the procedural requirements, but did not indicate how recurrence would be prevented or how new employees would be notified;

RESPONSE: Preventive actions:

1. Procedures DAPP 5-11 and DAPP 5-9 will be enhanced to specifically reinforce the requirement that DCPs are required prior to proceeding with issuing designs in lower tier documents.
2. An engineering stand-down to reinforce the procedural requirements, and the use of project checklist was held.

RESPONSE: New employee:

Each new employee must perform training to the project training matrix. The Shaw procedure (DAPP 5-11-3) section 6.1.6 requires engineers to use codes and standards directly from the Design Basis and will remind users of the need to process DCPs prior to issuing the lower tier document. Section 6.2.1 requires the reviewer to verify the same attributes.

- d) Shaw did not indicate whether it assessed the impact of using the incorrect revisions of industry standards and regulatory guide in the above design specifications on safety-related activities

RESPONSE: The specifications (APP-CC01-Z0-026, APP-CC01-Z0-027) referenced in CAR 2010-03-04-464 and CAR 2010-03-05-471 had not been used and have been removed from use. The calculation referenced in CAR 2010-03-04-464 has not been used and had been removed from use and has since been revised.

- e) Shaw did not address any corrective actions associated with calculation APP-G1-EWC-002.

RESPONSE: The Corrective Action in CAR 2010-03-04-464 was to revise calculation APP-G1-EWC-002 and to reference the correct codes and standards. This was completed on 6/28/2010.

## ENCLOSURE TWO

### REPLY TO NON 99901387/2010-201-05

#### NONCONFORMANCE

NON 99901387/2010-201-05 states that "the Shaw audit process for external and internal audits does not have implementing procedures governing the scheduling and processing of internal and external audits, including the tracking of audit open items to closure."

IR 99901387/2010-201-05, Section 5, states that "[a]lthough SWSQAP 1-74A and the Qs and QADs effectively address some of the audit program requirements, the NRC inspection team was unable to find internal and external audit implementing procedures that addressed overall audit controls for the scheduling, processing, tracking and closing of audit findings for items and activities affecting quality." In addition, IR 99901387/2010-201 states that "[i]n preparing for its 2009 internal QA audit, Shaw determined that the 2008 internal QA audit of its Charlotte office nuclear project activities was not performed. Additionally, the 2008 annual "Audit Finding Report" did not identify that the 2008 Internal QA audit of its Charlotte office nuclear project activities was not performed."

- a) "Your response did not address this missed internal audit,

RESPONSE: This condition was identified at the start of our 2009 internal audit of Charlotte office nuclear project activities (Audit No. 2009-04) and reported in Audit Observation No. 1. The cause of the cited condition is attributable to the fact that the original Lead Auditor earmarked to lead this audit was on temporary assignment in China. This assignment was extended to the point where the scheduled 2008 audit was not possible and was not recognized and acted upon in a timely manner. Subsequent investigation determined that this was an isolated occurrence.

The 2008 "Audit Finding Report" (Annual Audit Data Analysis Report) is for reporting audit trend information to Management and, as such, would not have prevented our not having performed the subject audit.

- b) "how scheduling of audits is controlled in existing Shaw procedures, and how the existing Shaw procedures will prevent recurrence of internal audits being missed."

RESPONSE: Not having performed the subject 2008 audit was not attributable to inadequate procedure requirements. However, Quality Assurance Directive (QAD) 18.1 was revisited to determine whether the procedure could be enhanced relative to audit scheduling. Accordingly, it was revised (QAD 18.1 Rev. P dated 7/07/10) as follows (text in italics is new text):

- c) "Your response did not address this missed internal audit,

RESPONSE: This condition was identified at the start of our 2009 internal audit of Charlotte office nuclear project activities (Audit No. 2009-04) and reported in Audit Observation No. 1. The cause of the cited condition is attributable to the fact that the original Lead Auditor earmarked to lead this audit was on temporary assignment in China. This assignment was extended to the point where the scheduled 2008 audit was not possible and was not recognized and acted upon in a timely manner. Subsequent investigation determined that this was an isolated occurrence.

The 2008 "Audit Finding Report" (Annual Audit Data Analysis Report) is for reporting audit trend information to Management and, as such, would not have prevented our not having performed the subject audit.

- d) "how scheduling of audits is controlled in existing Shaw procedures, and how the existing Shaw procedures will prevent recurrence of internal audits being missed."

RESPONSE: Not having performed the subject 2008 audit was not attributable to inadequate procedure requirements. However, Quality Assurance Directive (QAD) 18.1 was revisited to determine whether the procedure could be enhanced relative to audit scheduling. Accordingly, it was revised (QAD 18.1 Rev. P dated 7/07/10) as follows (text in italics is new text):

#### 4.2 Schedules

4.2.1 Quality Assurance shall issue an audit schedule that identifies the internal audits that are expected to be performed in a given year. *The first issue of an audit schedule for a given year shall be issued by the beginning of the last quarter of the previous calendar year. The schedule shall be periodically updated as information changes. By the end of each calendar quarter, the schedule shall be updated to identify the internal audits that are expected to be performed in the next 12 months.*

4.2.2 *Audit schedules shall be posted on ShawNet on the Nuclear Quality Assurance Home Page.*

These enhanced requirements for audit scheduling will provide sufficient controls and a heightened attention on the part of Quality Assurance Management with respect to audit scheduling needs and prevent recurrence of internal audits being missed.

## ENCLOSURE THREE

### REPLY TO NON 99901387/2010-201-06

#### **NONCONFORMANCE**

NON 99901387/2010-201-06 states that "Shaw's corrective action program lacks measures to ensure that 1) CAQs and SCAQs identified through the internal audit process are classified, and evaluated, consistent with QS 16.5, and 2) corrective actions for internal audit findings are received and promptly corrected. In addition, Shaw failed to implement effective corrective actions related to engineering good practices and attention to detail as identified in two different internal audits and failed to address and correct the identified CAQ in CAR 2009-03-19-85."

Your response stated that Quality Assurance Directive (QAD) 18.1 has been revised to address CAQs and SCAQs consistent with Criterion XVI, "Corrective Action," of Appendix B to 10 CFR Part 50. However, your response did not provide sufficient information on the revisions to QAD 18.1 to address this nonconformance.

RESPONSE: Quality Assurance Directive (QAD) 18.1 was revised (Rev. N dated 5/11/10) to:

1. Add definitions (to paragraph 4.3) of Condition Adverse to Quality (CAQ) and Significant Condition Adverse to Quality (SCAQ).
2. Add the following requirements:
  - 5.3 Audit Observation Completion
    - 5.3.1 Audit Observations shall be completed on the Audit Observation Form (Attachment 3.2) by the Lead Auditor. Audit Observation Forms shall be completed in DRAFT form for the post-audit conference and finalized in the audit report.
    - 5.3.2 Each reported condition shall be categorized as a Condition Adverse to Quality (CAQ) or a potentially Significant Condition Adverse to Quality (SCAQ) in accordance with definitions provided in paragraph 4.3.
    - 5.3.3 The following criteria should be used to determine if a reported condition is a potential SCAQ requiring further evaluation in the Corrective Action System:
      - Should the condition be reviewed for impact on the health and safety of the public or environment?
      - Should the condition be reviewed for impact on reliability, availability, or maintainability of equipment or facility?
      - Should the condition be reviewed for importance of meeting regulatory commitments?
      - Should the condition be reviewed for consequence of recurrence?

- Should the condition be reviewed for extent to which the adverse condition may apply to other items or activities beyond the specific occurrence where it may have greater impact?
- Should the condition be reviewed for impact on an Inspection, Test, Analysis, and Acceptance Criteria (ITAAC) conclusion, including closed ITAAC?

5.3.4 Based on a “YES” response to any of the above criteria the Lead Auditor shall check the “YES” block on the Audit Observation Form with respect to Potential SCAQ, initiate a CAR in accordance with Reference 2.7, and include the CAR Number on the Audit Observation Form. The Lead Auditor shall confer with Quality Assurance Department Management prior to finalizing this determination and CAR initiation.

5.3.5 Indeterminate conclusions regarding the above shall be treated as a “YES” determination.