



CB&I Laurens, Inc.
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June 27, 2017

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Chief, Construction Mechanical Vendor Branch
Division of Construction Inspection and Operational Programs
Office of New Reactors
Washington, DC 20555-0001

SUBJECT: REPLY TO U.S. NUCLEAR REGULATORY COMMISSION INSPECTION REPORT OF CHICAGO BRIDGE & IRON NO. 99901432/2017-201, AND NOTICE OF VIOLATION AND NOTICE OF NONCONFORMANCE

REFERENCE: LETTER FROM JOHN BURKE (NRC) TO JAMES M. ROSSIGNOL (CB&I LAURENS), U.S. NUCLEAR REGULATORY COMMISSION INSPECTION REPORT NO. 99901432/2017-201 AND NOTICE OF NONCONFORMANCE, DATED MARCH 30, 2017.

Dear Mr. Burke,

In response to the referenced NRC Notice of Nonformance (NON), CB&I Laurens herewith provides the enclosed reply (enclosure). The reply addresses: NON of the Notice as they relate Criterion 1 (Organization).

Pursuant to the NRCs corresponding instructions specified in the Notice, the enclosure addresses for the NON: 1) the reason for the noncompliance; 2) the corrective steps that have been taken and the results achieved; 3) the corrective steps that will be taken to avoid future noncompliance; and 4) the date when the corrective actions will be completed.

CB&I Laurens understands the feedback received from the NRC during the inspection and in the published inspection report. The feedback received is taken seriously and it is recognized that attention to this is necessary. Corrective actions have either been completed or initiated to remedy the specific findings provided to avoid further noncompliance.

IED9
NRD



Should you have any questions regarding this submittal, please contact Matt Rossignol, Quality Manager, at (864) 683-3986.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Rossignol', written in a cursive style.

Matt Rossignol
Quality Manager
CB&I Laurens

Enclosure:



Attachment 2

Reply to Notice of Nonconformance 99901432/2017-201-02

Based on the results of a U.S. Nuclear Regulatory Commission (NRC) inspection conducted at the Chicago Bridge & Iron (hereafter referred to as CB&I Laurens) facility in Laurens, SC, from January 23, 2017, through January 27, 2017, it appears that CB&I Laurens did not conduct certain activities in accordance with NRC requirements that were contractually imposed upon CB&I Laurens by its customers or NRC licensees:

Criterion I, "Organization," of Appendix B, "Quality Assurance Program Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," states, in part, that "The quality assurance functions are those of (1) assuring that an appropriate quality assurance program is established and effectively executed; and (2) verifying, such as by checking, auditing, and inspecting, that activities affecting the safety-related functions have been correctly performed."

Section 4.2.1 of CBIL-QAM-001 states, in part, that "The Plant Manager of CBIL is responsible for the establishment of the facilities for and overall operation of CBIL including but not limited to buildings, workspace, utilities, process equipment, and transport services." In addition, Section 4.2.9 states, in part, that the "Quality Assurance Manager is responsible for the administration and implementation of the Quality functions as described in this Manual, and reporting regularly to the Plant Manager on the effectiveness of the QA Program."

Contrary to the above, as of January 27, 2017, CB&I Laurens failed to ensure that portions of the quality assurance program were effectively executed, and failed to verify that activities affecting safety-related functions have been correctly performed. Specifically, CB&I Laurens failed to take timely and effective corrective actions to address several conditions adverse to quality and failed to adequately perform fabrication activities identified during the inspection. This included the implementation of quality activities in accordance with approved procedures and the oversight of suppliers. CB&I Laurens implemented a stop work order in March 2015 pending an evaluation of programmatic deficiencies and 10 CFR Part 21, "Reporting Defects and Noncompliance," issues, however, the findings described below demonstrate that CB&I Laurens is still not implementing an adequate quality assurance program in accordance with the requirements of Appendix B to 10 CFR Part 50.



Reason for Noncompliance

Through the performance of RCA CAR-2017-061, the Root Cause has been determined to be management failure to properly instill, enforce, and understand an adequate Nuclear Safety Culture.

Corrective actions taken

CB&I Laurens issued CAR-2017-061 to address this issue which included the completion of a Root Cause Analysis performed by personnel external to CB&I Laurens.

It was determined by corporate management that a change was needed with some leadership at the CB&I Laurens facility so the Plant Manager and subsequently the Production Manager were removed from their positions.

Corrective actions that will be taken

1. CB&I Management to develop a specific Vision, Mission and Values statement for site wide integration. This will include formal training modules, involvement of SME's for establishment of development, coaching and monitoring, and communication to the organization in regards to their personal accountability and responsibilities to an adequate Nuclear Safety Culture.
2. Develop and enforce accountability standards and expectations for procedural compliance, questioning attitude, identification of issues and importance of adequate implementation of the Quality Program.
3. Develop a focus on Corrective Action and Non Conformance Report programs, with analysis of trend data to evaluate site safety culture success and improvement. This should include formal training on the value and use of the Corrective Action Program (CAP) and its importance/role in process improvements.
4. CB&I Management to develop selection criteria for CB&I Laurens facility management to ensure demonstrated nuclear experience, Nuclear Safety Culture (NSC) and Safety Conscious Work Environment (SCWE) understanding, and base understanding of Quality Program implementation and how it ties to organizational performance.

Date when full compliance will be achieved

February 9, 2018