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March 13, 2015

L-CBILC-USNRC-000048

US Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Reply to Notice of Nonconformance Letter 99901425/2014-202

In response to the referenced United States Nuclear Regulatory Commission (NRC) Notice of Nonconformance (NON), CB&I Lake Charles (CB&I LC) herewith provide the attached response (Attachment 2). This reply addresses the attached NON (Attachment 1) as it relates to Criterion 16, Corrective Action.

Pursuant to the NRCs corresponding instructions specified in the NON, the attached response includes the reason for the noncompliance, the corrective steps that have been taken and the results achieved, the corrective steps that will be taken to avoid future noncompliance, and the date when the corrective actions will be completed.

CB&I LC understands the feedback received in the above referenced letter. We take that feedback seriously and recognize that the utmost attention is required to ensure corrective actions are put in place to avoid future noncompliance.

Sincerely,

3-13-15

Chris Fordham
Plant Manager
CB&I Lake Charles

Cc:

Kerri Kavanagh, Chief, Quality Assurance Inspection Branch, Division of Construction Inspection and Operational Programs
Ryan Zurkuhlen, Director Module Operations, CB&I Fabrication and Manufacturing, CB&I Lake Charles Vice President
Mike Annacone, Vice President, Nuclear Safety CB&I
Brian Gibson, Director of Quality for Modular Division, CB&I Fabrication and Manufacturing

Attachment #1 – Statement of Notice of Nonconformance
Attachment #2 – Response to Notice of Nonconformance

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Attachment #1

STATEMENT OF NOTICE OF NONCONFORMANCE

Chicago Bridge & Iron (Lake Charles) Docket No. 99901425
Report No. 2014-202

Based on the results of a U.S. Nuclear Regulatory Commission (NRC) inspection conducted at the Chicago Bridge & Iron Lake Charles (CB&I LC) facility in Lake Charles, LA, from December 1, 2014 through December 5, 2014, certain activities were not conducted in accordance with NRC requirements contractually imposed on CB&I LC by its customers or NRC licensees.

- A. Criterion XVI, "Corrective Action," of Appendix B to Title 10 of the Code of Federal Regulations (10 CFR) Part 50 states: "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to appropriate levels of management."

Section 16, "Corrective Action," of CB&I LC's Quality Assurance Manual, Revision 10, dated November 19, 2014, paragraph 16.1.6.b, states, in part, that "measures shall be developed for determining the root cause(s) of significant conditions adverse to quality. The root cause is the main underlying source of a condition adverse to quality that, when corrected, eliminates recurrence of the condition."

Contrary to the above, as of December 5, 2014, CB&I LC failed to assure that the cause of significant conditions adverse to quality was determined and corrective action taken to preclude recurrence. Specifically, CB&I LC failed to provide adequate objective evidence that the corrective actions to preclude the repetition of significant conditions adverse to quality associated with the quality assurance (QA) program breakdowns have been effectively determined and implemented. The NRC inspection team reviewed the corrective actions associated with the November 2013, December 2013 and September 2014 10 CFR 50.55(e) notifications related to CB&I LC QA program breakdowns categorized as significant conditions adverse to quality. The NRC inspection team noted that CB&I LC took corrective actions for the condition adverse to quality related to welding only. However, the NRC inspection team determined that CB&I LC did not perform a comprehensive review of the current effectiveness of the overall QA program in its entirety to verify that the root causes of the significant QA breakdown had been corrected.



Attachment 2

Reason for Noncompliance:

CB&I LC initiated Corrective Action Report (CAR) 2015-099 to perform causal analysis and determine corrective actions for this NRC identified nonconformance.

Based on the results of causal analysis documented in CAR 2015-099, it has been concluded that the reason for this noncompliance is that existing CB&I LC processes for analysis of significant conditions adverse to quality are focused on preventing recurrence of specific events and their associated causes.

The current analysis processes do not provide methods for evaluating the occurrence and recurrence of quality assurance program breakdowns associated with identified quality assurance program (QAP) elements and the extent of the breakdowns.

Additionally, it was noted during the review that once client review of a Part 21 or 10 CFR 50.55(e) evaluation has been completed, details of the results had not been communicated to the supplier. This communication would provide the allowance to align results and ensure causes and conditions are addressed in an accurate manner.

Corrective steps that have been taken and the results achieved:

The corrective action reports (CARs) discussed in the details section of the NRC inspection report 99901425/2014-202 were identified as significant conditions adverse to quality (SCAQs) that required root cause analysis (or "analyses") (RCAs). Upon completion of the associated RCAs, root causes, contributing causes and associated corrective actions were identified to minimize the potential for recurrence of the events.

As part of the analysis of this nonconformance, as documented in CAR 2015-099, a review was conducted of RCAs for conditions that were determined to be reportable under 10 CFR 50.55(e) (CAR 2013-739 and CAR 2013-1641), the basis for the Stop Work Order and the Chilled Environment Letter and associated RCA (CAR 2013-438). It was concluded that recurrent deficiencies were found in Criterion II Quality Assurance Program, V Instructions Procedures and Drawings, VII Control of Purchased Material, Equipment and Services, IX Special Processes, X Inspection, and XVI Corrective Action. It was further determined that a review should be performed to determine the current effectiveness of those CB&I LC QAP elements.

Corrective steps that will be taken to avoid further noncompliance:

Perform an evaluation of CB&I LC QAP elements for criterion II Quality Assurance Program, V Instructions Procedures and Drawings, VII Control of Purchased Material, Equipment and Services, IX Special Processes, X Inspection, and XVI Corrective Action to verify that the root causes of the significant QA breakdown have been corrected. This action will be completed by May 30, 2015.

Revise procedure QP-CA-301, "Cause Analyses," to provide instruction to conduct an evaluation during the process of a root cause analysis to determine if recurring breakdowns are occurring within identified QAP elements. This action will be completed by April 30, 2015.

Revise procedure QP-CA-301, "Cause Analyses," to provide instruction to generate a CAR to evaluate recurring QAP breakdowns identified during root cause analysis. Further instruction shall also include an evaluation to determine the overall effectiveness of that QAP element. This action will be completed by April 30, 2015.



Revise procedure QP-CA-301, "Cause Analyses," to provide instruction to document the relevant 10CFR 50 Appendix B QA program elements in the root cause analysis specific to the root and contributing causes of the issues identified. This action will be completed by April 30, 2015.

Provide training on regarding the revised QP-CA-301, "Cause Analysis," to CARB members with emphasis on identification of relevant QAP elements and how causes of significant conditions adverse to quality may be indicators of potential issues within identified program elements. This action will be completed by May 15, 2015.

Propose contractual document revision to require that the client provide completed 10CFR 21 and 10CFR 50.55(e) evaluations for reportable conditions applicable to CB&I LC upon completion. This will improve alignment between the client organization and CB&I LC. This action will be completed by April 30, 2015.