

December 15, 2014

EA-14-085

Mr. Luke Scorsone, Executive Vice President,
Group President Fabrication Services
CB&I Chicago Bridge & Iron
4171 Essen Lane
Baton Rouge, LA 70809

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION'S OFFICE OF INVESTIGATIONS
REPORT NO. 2-2013-024

Dear Mr. Scorsone:

This letter refers to an investigation initiated on April 13, 2013, by the U.S. Nuclear Regulatory Commission's (NRC) Office of Investigations (OI) relating to activities at the Chicago Bridge & Iron, Lake Charles, Louisiana, facility (CB&I-LC), formerly known as Shaw Modular Systems. The OI investigation was initiated to determine: (1) whether or not a production manager, rigging manager and a safety representative directed CB&I-LC personnel to falsify statements and, thus, create a false quality record associated with a sub-module destined for the V.C. Summer site, and (2) whether or not CB&I-LC willfully failed to correct a condition adverse to quality by creating an inaccurate condition report. The NRC completed its investigation on May 9, 2014, and a factual summary of the report is provided as Enclosure 1.

Based on the results of this investigation, two apparent violations of Title 10 of the *Code of Federal Regulations* (10 CFR) 52.4, "Deliberate misconduct," were identified, and are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>.

The first apparent violation of 10 CFR 52.4 involves two CB&I-LC officials (a Rigging Manager and a Safety Representative) who deliberately instructed other subordinate CB&I-LC employees to knowingly omit from an Incident Investigation Report that (1) the sub-module had dropped while being transported to a laydown area, (2) improper rigging equipment (nylon slings) had been used and had broken; and (3) the sub-module had sustained damage. In addition, CB&I-LC officials deliberately failed to document a condition adverse to quality regarding the incident and resultant damage to the sub-module. The second apparent violation of 10 CFR 52.4 involves two examples where CB&I-LC employees intentionally submitted false information relating to the dropped sub-module incident.

NRC staff considered whether these apparent violations warranted enforcement discretion as described in the Confirmatory Order (CO) issued to CB&I on September 25, 2014 (EA-13-196). The NRC has concluded that the examples of deliberate misconduct addressed by this CO were driven by a poor understanding of nuclear safety culture, and were the result of CB&I-LC managers and workers placing production and schedule concerns ahead of safety and quality.

However, the deliberate misconduct described in the enclosures appear to include an understanding of the nuclear safety implications that resulted from the mishandling and damage to the sub-module; yet, the CB&I officials and employees involved in the incident knowingly disregarded quality assurance program requirements designed to promptly identify and correct a deficient condition. Therefore, NRC staff concludes that the apparent violations of 10 CFR 52.4 do not warrant consideration for enforcement discretion.

Since the NRC has not made a final determination in this matter, a Notice of Violation is not being issued at this time. In addition, please be advised that the number and characterization of apparent violations described herein may change as a result of further NRC review. Before the NRC makes its enforcement decision, we are providing you an opportunity to: 1) respond to these two apparent violation(s) within 30 days of the date of this letter, or 2) request a Pre-decisional Enforcement Conference (PEC).

If a PEC is held, it will be closed to public observation because the NRC's preliminary findings are based on an NRC OI report that has not been publicly disclosed. However, the time and date of the PEC will be publicly announced. Please contact Ms. Kerri Kavanagh, Chief, Quality Assurance Vendor Inspection Branch at (301) 415-3743 or Mr. Timothy Frye, Enforcement Coordinator at (301) 415-3900 within 10 days of the date of this letter to inform us of your choice for response. A PEC should be held within 30 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as a "Response to NRC Investigation Report No. 2-2011-024; EA-14-085" and should include for each apparent violation: (1) the reason for the apparent violation or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a PEC.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a PEC does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the conference may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned.

Additionally, in consultation with the Director, Office of Enforcement, the NRC has decided to not offer the option of engaging in alternative dispute resolution (ADR) as had been recently offered for similar apparent violations of the deliberate misconduct rule (10 CFR 52.4). The NRC determined that the public interest would not be best served by engaging in ADR mediation because: 1) the CB&I-LC's level of management directly involved in the deliberate misconduct had knowledge of the contractually-imposed NRC requirements; 2) the NRC has

recently engaged in ADR mediation with CB&I and the most recent CO addresses a similar scope of corrective actions.

In addition, the investigation documents that the implementation of your Quality Assurance (QA) program related to the rigging and lifting of the sub-module failed to meet certain NRC requirements imposed on you by your customers. The specific findings and references to the pertinent requirements are identified in Enclosure 3 to this letter. Please provide a written statement or explanation within 30 days from the date of this letter in accordance with the instructions specified in the enclosed Notice of Nonconformance (NON). If you contest the NON, you should provide a response within 30 days of the date of this letter report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System, accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

If you have any questions concerning this matter, please contact Ms. Kerri Kavanagh, Chief, Quality Assurance Vendor Inspection Branch at (301) 415-3743 or Mr. Timothy Frye, Enforcement Coordinator at (301) 415-3900.

Sincerely,

/RA/

Michael C. Cheok, Director
Division of Construction, Inspection,
and Operational Programs
Office of New Reactors

Docket No. 99901425

Enclosures:

1. Factual summary of OI Investigation Report
No. 2-2013-024
2. Apparent Violations Being Considered for
Escalated Enforcement Action
3. Notice of Nonconformance

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See next page

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*via e-mail

NRO-002

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NAME	ABelen	TFrye	KKavanagh	Sghasemian	Chair*	MCheok
DATE	10/24/14	10/22/14	10/27/14	11/21/14	11/5/14	12/15/14

OFFICIAL RECORD COPY

Letter to Mr. Luke Scorsone from Michael C. Cheek dated December 15, 2014

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION'S OFFICE OF INVESTIGATIONS
REPORT NO. 2-2013-024

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Factual Summary of NRC Office of Investigations Case No. 2-2013-024

On April 13, 2013, the NRC OI initiated an investigation relating to activities at the CB&I-LC, Louisiana, facility. The purpose of the investigation was to determine whether or not a Production Manager, Rigging Manager and a Safety Representative directed CB&I-LC personnel to falsify statements regarding a dropped and damaged sub-module destined for the V.C. Summer site. Specifically, the investigation was to determine if CB&I-LC personnel were directed (or strongly encouraged) to omit in official statements that a synthetic sling had broken and that the sub-module had dropped. The OI investigation was completed on May 9, 2014.

On March 1, 2013, CB&I-LC rigging employees were attempting to move sub-module CA-01-20 to an outdoor laydown area by using a shuttle lift. While driving the shuttle lift to the sub-module's storage location, the operator was required to make a left turn. As the shuttle lift was making the left turn, the load (sub-module) swung violently, cutting one or more synthetic slings that were supporting the load. A corner of the sub-module dropped approximately 3.5 feet, striking a shuttle lift wheel fender before hitting the ground. After the rigging crew had safely secured the sub-module, one of the crew members called the rigging manager and the safety representative to the scene and briefed them on what happened. Shortly thereafter, the rigging manager and safety representative instructed the crew to write individual statements supporting an incident report but, with knowledge to the contrary, these same officials further instructed the crew to omit in their statements that synthetic (nylon) slings had broken and that the sub-module had, in fact, dropped. The rigging crew members followed these instructions and omitted these facts in their statements, thus creating a false record regarding a safety-related sub-module destined for the V.C. Summer Nuclear Plant.

After approximately one week, one of the riggers involved in the incident reported his incomplete and inaccurate written statement to the Employee Concern Program (ECP) representative and that he/she was instructed to write a false statement in the incident investigation report. The ECP representative opened an investigation and initiated a condition report regarding the incident. As a result, CB&I-LC conducted four separate investigations through the following programs: (1) ECP, (2) Industrial Safety, (3) Human Resources, and (4) Corrective Action Program (CAP). The Rigging Manager was assigned as the evaluator for the CAP investigation that focused on determining whether or not the sub-module had, indeed, dropped and if it had sustained damage. The Rigging Manager subsequently created a false quality record by deliberately omitting information relating to the evaluation of Condition Report (CR) CR 2013-315. The evaluation report for the CR stated that there was "no evidence...1) a free-fall occurred; 2) a nylon strap was used or broke during the lift; and 3) that the sub-module fell at all," despite the fact that the CB&I-LC manager had sufficient knowledge to the contrary.

Apparent Violations Being Considered for Escalated Enforcement

- A. Title 10 of the *Code of Federal Regulations* (10 CFR) 52.4(c)(1) states, in part, that an employee of a contractor of any licensee may not engage in deliberate misconduct that causes or would have caused, if not detected, a licensee to be in violation of any rule, regulation, or order; or any term, condition, or limitation of any license issued by the Commission.

Criterion XVI, "Corrective Action," of Appendix B, "Quality Assurance Program Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, states, in part, that "measures shall be established to assure that conditions adverse to quality, such as deficiencies and nonconformances are promptly identified and corrected."

Contrary to the above, on March 1, 2013, CB&I-LC employees engaged in deliberate misconduct that would have caused, if not detected, a licensee to be in violation of 10 CFR Part 50, Appendix B, Criterion XVI. Specifically, CB&I-LC officials (a Rigging Manager and a Safety Representative) deliberately instructed other subordinate CB&I-LC employees to knowingly omit from an Incident Investigation Report that: (1) the V. C. Summer CA-01-20 sub-module had dropped approximately 3.5 feet; (2) improper rigging equipment (nylon slings) had been used and had broken; and (3) the sub-module had sustained damage. In addition, CB&I-LC officials deliberately failed to document that a condition adverse to quality occurred regarding the incident and resultant damage to the sub-module. The deliberate acts of these officials caused other CB&I employees to submit inaccurate information to their employer, a contractor to an NRC license holder, regarding the incident. As a result, the deliberate actions on the part of these employees would have caused, if not detected, a licensee to be in violation of Criterion XVI of Appendix B to 10 CFR Part 50, in that there would not have been reasonable assurance that activities affecting quality were promptly identified and corrected.

- B. 10 CFR 52.4(c)(2) states, in part, that an employee of a contractor for any licensee may not deliberately submit to the NRC, licensee, or contractor, information that the person submitting the information knows to be incomplete or inaccurate in some respect material to the NRC.

Criterion XVI of Appendix B to 10 CFR Part 50, states, in part, that "measures shall be established to assure that conditions adverse to quality, such as deficiencies and nonconformances are promptly identified and corrected."

Criterion XV, "Nonconforming Materials, Part, or Components," of Appendix B to 10 CFR Part 50 states, in part, that: "measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation..... Nonconforming items shall be reviewed and accepted, rejected, repaired or reworked in accordance with documented procedures."

Contrary to the above:

1. On March 1, 2013, CB&I-LC employees engaged in deliberate misconduct by intentionally submitting false information related to the dropped sub-module incident.

Specifically, the employees omitted information that: (1) the V. C. Summer CA-01-20 sub-module had dropped approximately 3.5 feet; (2) improper rigging equipment (nylon slings) had been used and had broken; and (3) the sub-module had sustained damage in their original statements that supported an incident investigation Report. The incomplete and inaccurate information is material to the NRC because relevant facts associated with a potential nonconforming safety-related component were knowingly withheld and, if not detected, would have resulted in a condition adverse to quality not being promptly identified and corrected.

2. On or about March 15, 2013, a CB&I-LC employee engaged in deliberate misconduct by intentionally omitting information related to the dropped sub-module incident. Specifically, a CB&I-LC manager deliberately omitted information relating to an evaluation of Condition Report (CR) CR 2013-315. The evaluation report for the CR stated that there was “no evidence... 1) a free-fall occurred; 2) a nylon strap was used or broke during the lift; and 3) that the sub-module fell at all” despite the fact that the assigned evaluator (the CB&I-LC manager) had sufficient knowledge to the contrary. In addition, the CR concluded that the sub-module continued to conform to code requirements when the NCR 2013-306 information stated that the sub-module failed the flatness test and was waiting to be repaired. The incomplete and inaccurate information is material to the NRC because relevant facts associated with a nonconforming safety-related component were knowingly withheld and, if not detected, would have resulted in a condition adverse to quality not being promptly identified and corrected.

NOTICE OF NONCONFORMANCE

Chicago Bridge & Iron (Lake Charles)
Lake Charles, LA

Docket No. 99901425
EA-14-085

During an investigation conducted by the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations (OI), and completed on May 9, 2014 certain activities were not conducted in accordance with NRC requirements which were contractually imposed on the Chicago Bridge & Iron Lake Charles, Louisiana (CB&I-LC) facility by NRC licensees

- A. Criterion XIII, "Handling, Storage and Shipping," 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, states, in part, that "measures shall be established to control the handling, storage, shipping, cleaning and preservation of material and equipment in accordance with work and inspection instructions to prevent damage or deterioration."

CB&I LC Procedure CMS-830-17-PR-60001, "Lift and Rigging Plans," Revision 2, dated May 5, 2010, step 4.2 states "no lift shall proceed until all involved parties understand the lift plan and their duties. Pre-lift meeting and written lift plans can be effective methods of communication."

CB&I-LC Procedure CMS-710-02-PR-00800, "Lift Trucks (Forklifts) and Powered Industrial Trucks," Revision 2, dated August 9, 2009, step 4.1.3 states "only trained and authorized operators shall be permitted to operate powered industrial trucks."

Section 4.15, "Synthetic Web and Round Slings," of CB&I LC Procedure CMS-710-02-PR-02100, "Rigging Plan and Rigging Safety," Revision 4, dated February 24, 2012, step 4.15.1 states, in part, "CB&I do not allow the use of any type of synthetic sling for lifting of structural steel members."

Contrary to the above, as of March 1, 2013, CB&I-LC failed to control the handling of equipment in accordance with work and inspections instructions to prevent damage of safety related sub-module. Specifically, CB&I-LC performed a lift of VC Summer CA-01-20 sub-module without verifying that all involved parties understood the lift plan; allowed an unqualified operator drive the lift truck; and used a synthetic (nylon) sling rather than plate clamps to lift a sub-module. These actions resulted in: 1) the sub-module swaying due to a sharp turn of the lift truck, 2) the sling moving off the cushion and being cut on the edges of the sub-module resulting in the sling's failure, and 3) the sub-module dropping and being damaged.

Please provide a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Chief, Quality Assurance Vendor Inspection Branch, Division of Construction Inspection and Operational Programs, Office of New Reactors, within 30 days of the date of the letter transmitting this Notice of Nonconformance. This reply should be clearly marked as a "Reply to a Notice of Nonconformance" and should include for each noncompliance: (1) the reason for the

Enclosure 3

noncompliance or, if contested, the basis for disputing the noncompliance; (2) the corrective steps that have been and the results achieved; (3) the corrective steps that will be taken to avoid further noncompliance; and (4) the date when the corrective action will be completed. Where good cause is shown, the NRC will consider extending the response time.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), which is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>, to the extent possible, it should not include any personal privacy, proprietary, or Safeguards Information (SGI) so that the NRC can make it available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request that such material be withheld, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information would create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If SGI is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements."