UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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Chicago Bridge and Iron Company

In the Matter of

EA-12-189 and EA-13-196

CONFIRMATORY ORDER (EFFECTIVE IMMEDIATELY)

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Chicago Bridge and Iron (CB&I), is a large multinational conglomerate engineering, procurement and construction company serving various industries in the United States and overseas, some of which are regulated by the U.S. Nuclear Regulatory Commission (NRC). CB&I's main office is located in The Woodlands, Texas.

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This Confirmatory Order (referenced as Confirmatory Order or Order) is the result of agreements reached during two separate alternative dispute resolution (ADR) mediation cases. The first case (EA-12-189) involved two mediation sessions conducted on June 11, 2013, and July 29, 2013, and the second case (EA-13-196) involved one session that was conducted on May 30, 2014. All ADR mediation sessions were held in Rockville, Maryland.

Report of Investigation 2-2011-047 (EA-12-189)

On June 4, 2011, the NRC's Office of Investigations (OI) issued its report of investigation (OI Report No. 2-2011-047). The investigation related to a nuclear construction site in South

Carolina, operated by CB&I, formerly known as Shaw Nuclear Services, Inc. and hereafter referred to as Shaw. Based upon evidence developed during its investigation, the NRC identified an apparent violation of Title 10 of the *Code of Federal Regulations* (10 CFR) 52.5, "Employee protection," involving a former Shaw employee who was terminated, in part, for notifying Shaw and Louisiana Energy Service (at the direction of the individual's supervisor, a Shaw official), of a potential 10 CFR Part 21 issue regarding selected heats of rebar that had failed the American Society of Mechanical Engineers (ASME) bend test and may have been shipped to the Louisiana Energy Service facility. In addition, the NRC found Shaw's Code of Corporate Conduct to be overly restrictive and may prevent employees from raising nuclear safety concerns.

By letter dated October 19, 2012, the NRC identified to CB&I the apparent violation of 10 CFR 52.5 and offered CB&I the opportunity to provide a response in writing, attend a predecisional enforcement conference (PEC), or to request ADR in which a neutral mediator with no decision-making authority would facilitate discussions between the NRC and CB&I, and if possible, assist the NRC and the parties in reaching an agreement on resolving the concerns. In a letter dated January 15, 2013, CB&I provided a written response to the apparent violation. In the letter, CB&I denied it had violated 10 CFR 52.5, contending that the individual did not engage in a legally protected activity and was terminated solely for violating the company's Code of Conduct, which prohibited disclosing company confidential material to an unauthorized third party.

Based upon the information gathered through the NRC's investigation and the information provided in the written response, the NRC issued a Notice of Violation (Notice) and Proposed Imposition of Civil Penalties to CB&I on April 18, 2013. As part of the Notice, the NRC required CB&I to either reply in writing to the Notice or to request ADR. CB&I continued to

oppose the violation and, in lieu of continuing the enforcement process and eventually requesting a hearing on the violation, requested ADR.

On June 11, 2013 and July 29, 2013, the NRC and CB&I met in Rockville, Maryland for ADR sessions mediated by a professional mediator, arranged through Cornell University's Institute on Conflict Resolution. The ADR sessions resulted in the issuance of a Confirmatory Order in September 2013. This Confirmatory Order is issued, in part, pursuant to the agreement reached during these ADR mediation sessions.

Report of Investigation 2-2011-036 (EA-13-196)

On August 7, 2013, OI issued its report of investigation (OI Report No. 2-2011-036). The investigation related to a nuclear modular construction site located in Lake Charles, Louisiana, currently operated by CB&I and formerly known as Shaw Modular Solutions, Inc. (SMS). Based upon evidence developed during its investigation, the NRC identified an apparent violation of 10 CFR 52.4, "Deliberate misconduct," involving former SMS employees who deliberately subverted welder qualifications requirements when: (1) a welder took a welder qualifications test on behalf of a coworker; (2) the coworker allowed the welder to take the qualifications tests on his behalf; and (3) the weld test administrator certified that the coworker passed his welder qualifications tests when he knew that the tests were performed by another person.

In a letter to CB&I dated February 20, 2014, the NRC identified the apparent violation of 10 CFR 52.4 and offered CB&I the opportunity to provide a response in writing, attend a PEC, or to request ADR in which a neutral mediator with no decision-making authority would facilitate discussions between the NRC and CB&I, and if possible, assist the NRC and the parties in

reaching an agreement on resolving the concerns. By letter dated March 17, 2014, CB&I provided a written response to the apparent violation and requested a PEC. CB&I later amended its response and requested ADR in a letter dated April 22, 2014.

On May 30, 2014, the NRC and CB&I met in Rockville, Maryland for an ADR session mediated by a professional mediator, arranged through Cornell University's Institute on Conflict Resolution. This Confirmatory Order is issued, in part, pursuant to the agreement reached during this ADR mediation session, and supersedes the Confirmatory Order (EA-12-189) issued on September 16, 2013.

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The NRC acknowledges that CB&I had already undertaken actions related to a chilled work environment at its site in Lake Charles, Louisiana, formerly known as SMS. These actions were agreed to by CB&I in their May 17, 2013, letter in response to the NRC's chilling effect letter dated April 18, 2013. These actions include:

- Perform an independent focused assessment to determine if effective programmatic controls are in place at CB&I Lake Charles in the following five areas: control of special processes; inspections; personnel training and qualification; instructions, procedures, and drawings; and corrective actions.
- Review the independent contractor's 2012 nuclear safety culture assessment report and initiate corrective actions, as necessary.

 Enter the conditions associated with the Chilling Effect Letter into its corrective action program (CAP), characterize it as a significant condition adverse to quality (SCAQ), and complete a root cause analysis. CB&I shall evaluate the potential for similar issues at other CB&I nuclear facilities.

Pursuant to the September 16, 2013, Confirmatory Order (EA-12-189), CB&I also agreed to take additional actions within CB&I's business groups where nuclear related activities take place including:

- 1. Communicating CB&I's strategy to improve its nuclear safety culture recognizing that efforts to date have not been fully effective. This communication is to include a brief summary regarding employee protection, the NRC's concerns expressed in its April 18, 2013, Chilling Effect Letter regarding CB&I's Lake Charles site, and CB&I's experience, insights, lessons learned, and corrective actions both taken and planned. This communication will be followed by all-hands meetings for management to discuss the importance of the above written communication; and to allow employees to provide feedback and ask questions of management.
- 2. Ensuring that its nuclear safety culture and safety conscious work environment policies, guidance and related materials are in place, updated, and consistent with: 1) the NRC's March 2011 Safety Culture Policy Statement and associated traits; and 2) the NRC's May 1996 Safety Conscious Work Environment Policy Statement; and is informed by: 1) the NRC's Regulatory Issue Summary 2005-18, "Guidance for Establishing and Maintaining a Safety Conscious Work Environment"; and 2) the industry's common language initiative (i.e., INPO 12-012, Revision 1, April 2013).

- 3. Sharing the company's experience and insights with respect to improving nuclear safety culture, including lessons learned and actions taken in a presentation to other nuclear vendors in the industry at an NRC sponsored vendor conference; and if requested by the NRC, as a panelist in a breakout session at the 2014 Regulatory Information Conference.
- 4. Hiring a third-party, independent consultant to assist CB&I to develop and/or revise its employee protection, nuclear safety culture and safety conscious work environment training for CB&I nuclear employees.
- 5. Establishing a uniform Executive Review Board (ERB) process to ensure independent management review of all proposed significant adverse actions for all of its nuclear employees to ensure these actions comport with applicable employee protection requirements and nuclear safety culture traits, and to assess and mitigate the potential for any chilling effect.
- 6. Developing a single Employee Concerns Program (ECP) for CB&I nuclear employees.
- Developing individual performance appraisal assessment criteria for individual supervisor's appraisals to evaluate if these individuals are meeting CB&I's expectations with regards to employee protection, Nuclear Safety Culture and Safety Conscious Work Environment.
- 8. Establishing, where applicable, an active corrective action program (CAP) trending process to include the ability to trend root and contributing causes related to CB&I's

nuclear safety culture and incorporate trending information in a process similar to that in NEI 09-07.

- Developing a process by which personnel engaged in work associated with NRCregulated activities departing the company are given the opportunity to participate in an Employee Concerns Program Exit Interview/Survey to facilitate identification of nuclear safety issues, resulting trends and conclusions.
- 10. Establishing a nuclear safety culture oversight program, including one or more committees advised by external consultants with extensive nuclear experience.
- 11. Establishing a CB&I Nuclear Safety Officer function to address company-wide nuclear safety culture and safety conscious work environment activities.
- 12. Hiring a third-party, independent consultant to perform tailored comprehensive nuclear safety culture assessments, including site surveys, of all CB&I nuclear business entities not already assessed by a licensee and perform assessments or surveys to ensure effectiveness of the Nuclear Safety Culture and Safety Conscious Work Environment programs. Follow-up assessments or surveys shall be conducted every two years for a total of 4 years.
- 13. Revising its Code of Corporate Conduct to include a provision stating that all employees have the right to raise nuclear safety and quality concerns to CB&I, the NRC, and Congress, or engage in any other type of protective activity without being subject to disciplinary action or retaliation.

Subject to the satisfactory completion of the conditions of the September 16, 2013, Confirmatory Order by CB&I, the NRC exercised its enforcement discretion and withdrew the Notice of Violation and Proposed Imposition of Civil Penalties issued on April 18, 2013.

As a result of the second ADR mediation session (EA-13-196) held on May 30, 2014, the NRC acknowledges that CB&I has taken corrective actions related to the apparent willful violations described in the NRC's letter dated February 20, 2014. These actions are documented in a CB&I letter dated June 16, 2014, following the second mediation session, and include:

- The issues surrounding the apparent violations (EA-13-196) were entered into CB&I's CAP. The resulting condition report was classified as a SCAQ and a root cause investigation was performed.
- CB&I promptly notified the NRC of the apparent violations and the potential willful actions by some of its employees.
- The employment of the individuals involved in the apparent violations was terminated after an internal investigation determined that their actions were willful and unacceptable.
- 4. CB&I verified that no materials impacted by this issue were shipped from Lake Charles.

The NRC further acknowledges the following corrective actions taken and planned by CB&I to address willful violations of NRC requirements as described in the June 16, 2014, letter:

- Corrective actions to prevent recurrence of the apparent violations were identified. This
 includes training focused on the meaning of one's signature and the significance of
 deliberate/willful violations. This content was added to the new employee orientation at
 Lake Charles. A signature verification process was also implemented.
- All-Hands meetings were held to discuss the significance of deliberate and/or willful violations.
- CB&I implemented improvements to the weld production completion process, increased Quality Assurance oversight of weld test controls, and implemented additional verification activities by supervision and Quality Assurance.
- Extent of cause and extent of condition reviews were performed and identified issues were corrected.
- 5. To support the monitoring and oversight of deliberate/willful misconduct at its facilities, CB&I implemented trend codes in its CAP related to the ability to trend procedure related issues/violations. Additionally, CB&I implemented an Executive Nuclear Safety Council comprised of senior facility and business line leaders and external consultants with extensive nuclear industry experience. This Council will assess nuclear safety performance across all locations and ensure corrective actions are taken company wide as needed for common or significant performance issues (such as deliberate/willful violations).

Additionally, as a result of the second ADR mediation case (EA-13-196), an agreement in principle was reached in which CB&I agreed to take further actions within its business groups where nuclear related activities take place, including:

- 1. Adding willful violations and deliberate misconduct training to the scope of the training required by the September 16, 2013, Confirmatory Order. Training shall note that employees could be subject to individual enforcement action and/or sanctions for deliberate misconduct. The training shall also include a case study on willful violations and deliberate misconduct. The purpose of this training is also to familiarize CB&I employees with relevant NRC regulations (e.g., Appendix B to 10 CFR Part 50), and how NRC regulations are incorporated into CB&I policies, procedures and work practices in order to ensure that all CB&I employees understand their roles and responsibilities regarding compliance with NRC requirements.
- 2. Revising CB&I's safety culture monitoring program to include focused questions on willful violations and deliberate misconduct. CB&I will also include willful violations and deliberate misconduct in CB&I's ECP effectiveness reports and assessments, and ERB tracking. CB&I will also revise the ECP exit interview form to include questions relating to whether or not the departing employee is aware of any deliberate/willful misconduct.
- 3. Reinforcing CB&I's expectations regarding wrongdoing, and compliance with procedures and NRC requirements through various forms of communication at Lake Charles. Site managers and/or supervisors will periodically convey the lessons learned from relevant example wrongdoing cases during organizational meetings.

On September 22, 2014, CB&I consented to the NRC issuing this Confirmatory Order with the commitments, as described in Section IV below. CB&I further agreed in its September 22, 2014, letter that this Order is to be effective upon issuance and that it has waived its right to a hearing. In view of this Confirmatory Order, consented by CB&I thereto as evidenced by their signed "Consent and Hearing Waiver Form" and subject to the satisfactory completion of the conditions of this Confirmatory Order by CB&I, the NRC is exercising its enforcement discretion and will not pursue the issuance of a Notice of Violation and Proposed Imposition of a Civil Penalty. In addition, the Confirmatory Order dated September 16, 2013, is hereby rescinded and replaced with this Confirmatory Order.

The NRC has concluded that its concerns can be resolved through effective implementation of CB&I's commitments. I find that CB&I's commitments as set forth in Section IV are acceptable and necessary and conclude that with these commitments the public health and safety are reasonably assured. In view of the foregoing, I have determined that the public health and safety require that CB&I's commitments be confirmed by this Order. Based on the above and CB&I's consent, this Order is immediately effective upon issuance.

IV

Accordingly, pursuant to Sections 103, 161b, 161i, 161o, 182, and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and 10 CFR Part 52, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT:

Note: For purposes of this Confirmatory Order, the term "employees" shall mean persons employed by CB&I and its contractors and subcontractors, excluding (a) short term (less than ninety (90) days) contractors, and subcontractors, and (b) suppliers, who are

engaged in work associated with NRC-regulated activities at or directly related to a CB&I site or project.

A. Communication

- 1. By no later than November 30, 2013, the CB&I Chief Executive Officer shall:
 - a) Communicate, in writing, to its current employees CB&I's strategy to improve its nuclear safety culture recognizing that efforts to date have not been fully effective. This communication shall include a brief summary of the subject of this settlement agreement regarding employee protection, the NRC's concerns expressed in its April 18, 2013, Chilling Effect Letter regarding CB&I's Lake Charles site, and CB&I's experience, insights, lessons learned, and corrective actions both taken and planned.
 - CB&I shall provide a copy of this communication to the NRC for prior review.
 - Require copies of the communication described above to be posted for fortyfive (45) days in prominent locations where employees congregate.
 - c) Require all CB&I business units associated with NRC-regulated activities to hold all-hands meetings: 1) for management to discuss the importance of the above written communication; and 2) to allow employees to provide feedback and ask questions of management related to the communication listed above.

- 2. By no later than December 31, 2013, CB&I shall ensure that its nuclear safety culture and safety conscious work environment policies, guidance, and related materials (e.g., brochures, posters) are in place, updated, and consistent with: 1) the NRC's March 2011 Safety Culture Policy Statement and associated traits; and 2) the NRC's May 1996 Safety Conscious Work Environment Policy Statement; and is informed by: 1) the NRC's Regulatory Issue Summary 2005-18, "Guidance for Establishing and Maintaining a Safety Conscious Work Environment"; and 2) the industry's common language initiative (INPO 12-012, Revision 1, April 2013).
 - a) Copies of these materials shall be provided to the NRC for review at least two(2) weeks prior to issuance.
 - b) CB&I shall maintain and implement the materials in Section A.2.
 - c) CB&I will distribute copies of these updated policies and brochures to employees, and inform employees where all related materials can be located. These policies and brochures shall be maintained and provided to all new employees during initial orientation.
- 3. A senior CB&I manager shall share the company's experience and insights with respect to improving nuclear safety culture, including lessons learned and actions taken in a presentation:
 - a) To other nuclear vendors in the industry at the next NRC vendor workshop currently scheduled for June 2014. The presentation shall be submitted to the NRC for review within one (1) month of the scheduled workshop.

- b) If requested by the NRC, as a panelist in a breakout session at the 2014 Regulatory Information Conference.
- 4. For the following eighteen (18) months after issuance of this Confirmatory Order, CB&I supervisors at Lake Charles shall periodically reinforce expectations regarding safety conscience work environment and wrongdoing to their respective work units such that employees receive a relevant message on one or more of these topics at least once per quarter. The periodic reinforcement may be accomplished as part of a routine pre-job brief or through other forms of communication, such as the use of company-wide posters or site supervisors conveying company values and/or lessons learned from relevant example wrongdoing cases during organizational meetings.

B. Training

- By no later than December 31, 2013, CB&I shall hire a third-party, independent consultant, unrelated to the proceedings at issue, who is experienced with NRC employee protection regulations, Section 211 of the Energy Reorganization Act, as amended, and nuclear safety culture and safety conscious work environment policies, to assist CB&I to develop and/or revise its employee protection, nuclear safety culture and safety conscious work environment training for all CB&I employees.
 - a) Training shall include case studies of discriminatory practices.
 - b) Training shall define key terms included in employee protection regulations, nuclear safety culture and safety conscious work environment policy

statements, and be informed by the industry's common language initiative (e.g., nuclear safety issue, protected activity, adverse action, nuclear safety culture traits).

- c) Training shall include topics such as behavioral expectations with regard to each nuclear safety culture trait. Training shall also include expectations for demonstrating support for raising nuclear safety and quality concerns, and all available avenues without fear of retaliation.
- d) Training on CB&I's Corrective Action Program will also be incorporated, and will emphasize the low threshold for reporting, employee's rights, responsibilities and expectations for raising nuclear safety and quality issues and initiating corrective action documentation.
- e) By July 15, 2014, the training shall include willful violations of NRC requirements and deliberate misconduct. Training shall note that employees could be subject to individual enforcement action and/or sanctions for violations of NRC requirements involving deliberate misconduct. This training shall also include a case study on willful violations of NRC regulations and deliberate misconduct.
- f) By September 16, 2014, CB&I shall revise new employee orientation training to include the subject of willful violations of NRC regulations and deliberate misconduct. This training shall note that employees could be subject to individual enforcement action and/or sanctions for violations of NRC requirements involving deliberate misconduct. Training shall include an

overview of how NRC regulations (specifically, at minimum, 10 CFR 52.4, "Deliberate misconduct," and 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants") apply to work being performed by CB&I and shall include a statement that NRC regulations are incorporated into CB&I policies, procedures and work practices to ensure that all CB&I employees understand their roles and responsibilities regarding compliance with NRC requirements.

- g) The training material shall be made available to the NRC upon request.
- 2. <u>Supervisory Training</u>: Initial training, developed in paragraph B.1 above, for supervisors shall be piloted at least in part by a team consisting of the independent consultant and CB&I employees with expertise in these areas. Once finalized, this training will be conducted by the independent consultant at CB&I's Lake Charles site and may be conducted by CB&I employees trained by the team who developed and piloted the training at the other CB&I sites.
 - a) The training shall commence no later than April 1, 2014.
 - All training must be completed by December 31, 2014, and shall include a message from senior management.
 - c) Refresher training:

- Shall be primarily instructor led and be provided at least every two years for a period of four (4) years. This training may be provided by CB&I training staff.
- ii. Thereafter, refresher training may be computer-based and shall be provided annually.
- d) Training records shall be retained consistent with applicable CB&I record retention policies and be made available to the NRC upon request.
- 3. CB&I shall conduct primarily instructor-led employee protection, nuclear safety culture, safety conscious work environment training and willfulness training twice per year for any new supervisors hired after the initial training conducted as described in paragraphs 1 and 2 above.
- 4. <u>Employee (Non-Supervisory) Training</u>: Initial training, developed in paragraph B.1, for employees shall be piloted at least in part by a team consisting of the independent consultant and CB&I employees with expertise in these areas. Once finalized, this training will be conducted by the independent contractor at CB&I's Lake Charles site and may be conducted by CB&I employees trained by the team who developed and piloted the training at other CB&I sites.
 - a) All employees training shall commence within six (6) months following completion of their designated line managements' training.

- All training must be completed by March 31, 2015, and shall include a message from senior management.
- c) Refresher training may be computer-based and shall be provided annually.
- d) Training will be primarily instructor led for new employees as part of their orientation program/process.
- e) Training records shall be retained consistent with applicable CB&I record retention policies and be made available to the NRC upon request.
- <u>Short-term Employee Training</u>: Employees employed by CB&I for less than ninety (90) days will receive a "one pager" that captures the key elements of the training developed in Section B.1 above.

C. Work Processes

1. By no later than March 31, 2014, where not already required by the applicable nuclear facility licensee, CB&I shall establish and maintain a uniform Executive Review Board (ERB) process to ensure independent management review of all proposed significant adverse actions (defined as three or more days off without pay up to and including termination for cause, but excluding reductions-in-force and other ordinary layoffs) for all of its employees below the level of Vice President to ensure these actions comport with applicable employee protection requirements and nuclear safety culture traits, and to assess and mitigate the potential for any chilling effect. The ERB shall review significant adverse actions prior to their execution.

- a) The ERB process and procedure(s) shall be informed by benchmarking at least
 2 organizations in the nuclear industry with developed processes. The ERB
 process shall be included as a topic in the training developed in Section B.1.
- b) Each ERB shall be comprised of management personnel, including legal and/or human resources participation. The ERB shall be informed of any known relevant protected activity engaged in by the subject employee, including via the Employee Concerns Program (ECP), but ECP personnel shall not be a participating member of the ERB.
- c) Upon request, CB&I shall make available copies of the ERB process and procedure, including documentation of ERB decisions made after the Confirmatory Order, to the NRC. CB&I shall maintain documentation of each ERB decision for a minimum of 5 years.
- d) By no later than December 31, 2014, willful violations of NRC regulations and deliberate misconduct will be added to ERB tracking as part of the safety culture monitoring and oversight program scope.
- By no later than March 31, 2014, CB&I shall develop and maintain a single Employee Concerns Program (ECP) for all CB&I employees.
 - a) The ECP, including position descriptions, shall be informed by benchmarking at least 2 organizations in the nuclear industry with developed processes.

- b) The ECP Functional Manager will report to the Vice President, Nuclear Safety for these activities, with day-to-day reporting and oversight by the Director of Nuclear Compliance.
- c) ECP personnel shall receive appropriate training, including investigative techniques.
- d) By no later than September 30, 2014, ECP effectiveness reports and assessments shall include all instances of willful violations of NRC regulations and deliberate misconduct discovered by, or otherwise made known to, ECP personnel.
- 3. CB&I shall develop and maintain individual performance appraisal assessment criteria for individual supervisor's appraisals to evaluate if these individuals are meeting CB&I's expectations with regards to employee protection, Nuclear Safety Culture and Safety Conscious Work Environment. Implementation will begin in the performance appraisal cycle in the year following completion of the supervisory training in B.2 above.
- 4. CB&I shall enhance or establish, where applicable, an active CAP trending process to include the ability to trend root and contributing causes related to CB&I's nuclear safety culture and incorporate trending information in an NEI 09-07 like process; implementation will begin in concert with the implementation of the activities as described in C.7. By no later than September 30, 2014, CB&I's CAP shall have the ability to trend procedure-related issues and violations. Any trends in wrongdoing

identified through ECP and ERB monitoring shall be entered into the Corrective Action Program.

- 5. By no later than March 31, 2014, CB&I shall develop and implement a process by which personnel engaged in work associated with NRC-regulated activities departing the company are given the opportunity to participate in an Employee Concerns Program (ECP) Exit Interview/Survey to facilitate identification of nuclear safety issues, resulting trends and conclusions. These assessments and any actions resulting from the exit interviews shall be made available to the NRC for review upon request. By no later than September 30, 2014, the ECP exit interview process shall include content related to willful violations of NRC regulations and deliberate misconduct.
- CB&I shall maintain a toll-free anonymous reporting service manned by an independent company for use by all its employees to raise nuclear safety and quality concerns.
- 7. By no later than March 31, 2014, CB&I shall establish and maintain a nuclear safety culture oversight program, including one or more committees advised by external consultants with extensive nuclear experience. This program will provide input to CB&I facility and site management as described below.
 - a) The Program will assess at least twice a year the nuclear safety culture trends in process inputs that could be early indications of a nuclear safety culture weakness.

- b) The Program shall be informed by NEI's 09-07 guidance and by benchmarking at least 2 organizations in the nuclear industry with developed processes.
- c) The Program shall be directed by the Vice President Nuclear Safety/Nuclear Safety Officer who shall oversee actions as appropriate.
- d) By no later than September 30, 2014, the identification and tracking of willful violations of NRC regulations and deliberate misconduct shall be incorporated into the safety culture oversight monitoring program.
- 8. By no later than October 31, 2014, CB&I shall enter the conditions associated with the wrongdoing event described in the NRC's February 20, 2014, letter into its CAP, characterized as a significant condition adverse to quality (SCAQ), and complete a root cause analysis. CB&I shall evaluate the potential for similar issues at other CB&I nuclear facilities and, if appropriate, initiate additional corrective actions to address the cause of the wrongdoing.
- 9. By September 30, 2014, CAP guidance shall be revised as needed to ensure future wrongdoing events are evaluated to determine if they are SCAQ and require a root cause analysis. Wrongdoing-related SCAQs will be reviewed for applicability at other CB&I nuclear-related facilities.
- 10. By September 30, 2014, CB&I shall revise applicable procedures on procedure use and adherence to reinforce the requirements of 10 CFR 52.6. Specifically, CB&I shall ensure that the "Roles and Responsibilities" section clearly articulates: (1) the use and purpose of an individual's signature; (2) that procedural requirements are

expected to be met; and (3) that complete and accurate information is to be documented. Additionally, the "Roles and Responsibilities" section of the procedure shall include a warning about the significance of falsification of documents in relation to nuclear safety and violation of NRC requirements.

D. Assess and Monitor Nuclear Safety Culture and Safety Conscious Work Environment

- CB&I had previously established a CB&I Nuclear Safety Officer function to address company-wide nuclear safety culture and safety conscious work environment activities. The Vice President of Nuclear Safety has been assigned the duties of the Nuclear Safety Officer.
- 2. By no later than March 31, 2014, CB&I shall hire a third-party, independent consultant to perform tailored comprehensive nuclear safety culture assessments, including site surveys, of all CB&I nuclear business entities not already assessed by a licensee and perform assessments or surveys within twelve (12) months to ensure effectiveness of the Nuclear Safety Culture and Safety Conscious Work Environment programs.
 - a) Follow-up assessments or surveys shall be conducted every 2 years for a total of 4 years. These future nuclear safety culture assessments or surveys shall be comparable to one another to allow for effective evaluation of trends.
 - b) CB&I shall make available to the NRC, upon request, the results of the assessments or surveys, CB&I's analysis of the trends, results, and proposed

corrective actions, if any, CB&I will take to address the results in order to verify that a healthy nuclear safety culture and safety conscious work environment exists at CB&I nuclear business entities.

- c) The results of each assessment or survey and CB&I's plan to address the results shall be communicated to employees within three (3) months of receiving the assessment/survey results.
- d) By no later than September 16, 2014, focused questions on willful violations of NRC regulations and deliberate misconduct shall be incorporated into safety culture assessments.
- As committed to in CB&I's May 17, 2013, response to the NRC's April 18, 2013, Chilling Effect Letter, CB&I shall:
 - a) By September 20, 2013, perform an independent focused assessment to determine if effective programmatic controls are in place at CB&I Lake Charles in the following five areas: control of special processes; inspections; personnel training and qualification; instructions, procedures, and drawings; and corrective action. The assessment team will include, but will not be limited to, representatives from Southern Nuclear Operating Company, South Carolina Electric and Gas Company, and CB&I Power.
 - Evaluate the results of the independent focused assessment and take corrective actions as appropriate by October 31, 2013.

4. As committed to in CB&I's May 17, 2013, response to the NRC's April 18, 2013, Chilling Effect Letter, CB&I reviewed the independent contractor's 2012 nuclear safety culture assessment report and initiated corrective actions, as necessary. The results of this report were communicated to the Lake Charles workforce at an all hands meeting on July 24, 2013.

E. Other

- As committed to in CB&I's May 17, 2013, response to the NRC's April 18, 2013, Chilling Effect Letter, CB&I Lake Charles has entered the conditions associated with the Chilling Effect Letter into its corrective action program, characterized it as a significant condition adverse to quality, and completed a root cause analysis. By no later than six (6) months after issuance of the Confirmatory Order, CB&I shall evaluate the potential for similar issues at other CB&I nuclear sites.
- 2. By no later than December 31, 2013, CB&I will revise and maintain its Code of Corporate Conduct to include a provision stating that all employees have the right to raise nuclear safety and quality concerns to CB&I, the NRC, and Congress, or engage in any other type of protected activity without being subject to disciplinary action or retaliation and that no other corporate policy may supersede, limit, or otherwise discourage an employee's right to raise a nuclear safety or quality concern.
 - a) By no later than December 31, 2014, CB&I shall revise its Code of Conduct
 Policy to incorporate "Deliberate Misconduct" requirements and its applicability
 to employees engaged in NRC-regulated activities.

 By no later than March 1, 2015, the new section must be included, and explained, in the training conducted in Section IV.B above.

In consideration for the actions and/or initiatives that CB&I agrees to undertake, as outlined above, the NRC agrees to the following:

- The NRC agrees to exercise enforcement discretion and withdraw the Notice of Violation and Proposed Imposition of Civil Penalties relating to employee protection and the Shaw Code of Conduct (EA-2012-189).
- The NRC agrees to exercise enforcement discretion and not pursue a Notice of Violation and Proposed Imposition of Civil Penalties relating to violations of 10 CFR 52.4, "Deliberate misconduct," as documented in OI Report 2-2011-036 (EA-2013-196).
- 3. This Confirmatory Order does not affect other potential escalated enforcement actions, including ongoing investigations by the NRC's Office of Investigations. However, as part of its deliberations and consistent with the philosophy of the Enforcement Policy, Section 3.3, "Violations Identified Because of Previous Enforcement Action," the NRC will consider enforcement discretion for violations with similar root causes (i.e., EA-2012-189 and EA-2013-196) that occur prior to or during implementation of the corrective actions aimed at correcting that specific condition as specified in the Confirmatory Order. However, in the event that CB&I does not demonstrate that the work environment at its domestic sites and projects has improved as a result of the agreed-to corrective actions, the NRC may consider escalated enforcement action beyond the base civil penalty as provided for in the NRC Enforcement Policy.

 Confirmatory Order EA-12-189, dated September 16, 2013, is rescinded in its entirety, and is replaced by this Confirmatory Order.

The Director, OE, may, in writing, relax or rescind any of the above conditions upon demonstration by CB&I of good cause.

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In accordance with 10 CFR 2.202, CB&I and any other person adversely affected by this Order may submit an answer to this Order within 30 days of issuance. In addition, any other person adversely affected by this Order may request a hearing on this Order within 30 days of issuance. Where good cause is shown, consideration will be given to extending the time to answer or request a hearing. A request for extension of time must be directed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, and include a statement of good cause for the extension.

All documents filed in NRC adjudicatory proceedings, including a request for hearing, a petition for leave to intervene, any motion or other document filed in the proceeding prior to the submission of a request for hearing or petition to intervene, and documents filed by interested governmental entities participating under 10 CFR 2.315(c), must be filed in accordance with the NRC E-Filing rule (72 FR 49139, August 28, 2007, as amended by 77 FR 46562, August 3, 2012), codified in pertinent part at 10 CFR Part 2, Subpart C. The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases to mail copies on electronic storage media. Participants may not submit paper copies of their filings unless they seek an exemption in accordance with the procedures described below.

To comply with the procedural requirements of E-Filing, at least 10 days prior to the filing deadline, the participant should contact the Office of the Secretary by e-mail at hearing.docket@nrc.gov, or by telephone at (301) 415-1677, to request (1) a digital ID certificate, which allows the participant (or its counsel or representative) to digitally sign documents and access the E-Submittal server for any proceeding in which it is participating; and (2) advise the Secretary that the participant will be submitting a request or petition for hearing (even in instances in which the participant, or its counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the hearing in this proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on NRC's public Web site at <u>http://www.nrc.gov/site-help/e-submittals/getting-started.html</u>. System requirements for accessing the E-Submittal server are detailed in NRC's "Guidance for Electronic Submission," which is available on the agency's public Web site at <u>http://www.nrc.gov/site-help/e-</u> <u>submittals.html</u>. Participants may attempt to use other software not listed on the web site, but should note that the NRC's E-Filing system does not support unlisted software, and the NRC Meta System Help Desk will not be able to offer assistance in using unlisted software.

If a participant is electronically submitting a document to the NRC in accordance with the E-Filing rule, the participant must file the document using the NRC's online, web-based submission form. In order to serve documents through EIE, users will be required to install a web browser plug-in from the NRC web site. Further information on the web-based submission form, including the installation of the Web browser plug-in, is available on the NRC's public web site at <u>http://www.nrc.gov/site-help/e-submittals.html</u>.

Once a participant has obtained a digital ID certificate and a docket has been created, the participant can then submit a request for hearing or petition for leave to intervene through the EIE. Submissions should be in Portable Document Format (PDF) in accordance with NRC guidance available on the NRC public Web site at <u>http://www.nrc.gov/site-help/e-</u>

<u>submittals.html</u>. A filing is considered complete at the time the documents are submitted through the NRC's E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. Eastern Time (ET) on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an e-mail notice confirming receipt of the document. The E-Filing system also distributes an e-mail notice that provides access to the document to the NRC Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the documents on those participants separately. Therefore, any others who wish to participate in the proceeding (or their counsel or representative) must apply for and receive a digital ID certificate before a hearing request/petition to intervene is filed so that they can obtain access to the document via the E-Filing system.

A person filing electronically using the agency's adjudicatory E-Filing system may seek assistance by contacting the NRC Meta System Help Desk through the "Contact Us" link located on the NRC web site at <u>http://www.nrc.gov/site-help/e-submittals.html</u>, by e-mail at MSHD.Resource@nrc.gov, or by a toll-free call at (866) 672-7640. The NRC Meta System Help Desk is available between 8 a.m. and 8 p.m., ET, Monday through Friday, excluding government holidays.

Participants who believe that they have a good cause for not submitting documents electronically must file an exemption request, in accordance with 10 CFR 2.302(g), with their initial paper filing requesting authorization to continue to submit documents in paper format.

Such filings must be submitted by: (1) first class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff. Participants filing a document in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service. A presiding officer, having granted an exemption request from using E-Filing, may require a participant or party to use E-Filing if the presiding officer subsequently determines that the reason for granting the exemption from use of E-Filing no longer exists.

Documents submitted in adjudicatory proceedings will appear in NRC's electronic hearing docket, which is available to the public at <u>http://ehd1.nrc.gov/ehd/</u>, unless excluded pursuant to an order of the Commission or the presiding officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings, unless an NRC regulation or other law requires submission of such information. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their submission.

If a person other than CB&I requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.309(d) and (f).

If a hearing is requested by a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearings. If a hearing is held, the issue to be considered at such hearing shall be whether this Order should be sustained. Pursuant to 10 CFR 2.202(c)(2)(i), any other person adversely affected by this Order, may, in addition to demanding a hearing, at the time the answer is filed or sooner, move the presiding officer to set aside the immediate effectiveness of the Order on the ground that the Order, including the need for immediate effectiveness, is not based on adequate evidence but on mere suspicion, unfounded allegations, or error. In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section IV above shall be final 30 days from the date of issuance of this Order without further order or proceedings. If an extension of time for requesting a hearing has been approved, the provisions specified in Section IV shall be final when the extension expires if a hearing request has not been received.

AN ANSWER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

Dated at Rockville, Maryland, this 25th day of September 2014

For the Nuclear Regulatory Commission.

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Patricia K. Holahan, PhD., Acting Director Office of Enforcement