UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 25, 2006

Mr. Kirk Kelhofer, President
Crane Nuclear, Incorporated
2825 Cobb International Boulevard
Kennesaw, Georgia 30152- 4352

SUBJECT: NRC INSPECTION REPORT 99901358/2006-201, NOTICE OF VIOLATION AND NOTICE OF NONCONFORMANCE

Dear Mr. Kelhofer:

On April 24-27, 2006, U.S. Nuclear Regulatory Commission (NRC) inspectors conducted an inspection at the Crane Nuclear, Incorporated (Crane Nuclear) facility in Kennesaw, Georgia. The enclosed report presents the details of that inspection.

The NRC inspectors reviewed the implementation of selected portions of Crane Nuclear's quality assurance (QA) program, and evaluated the effectiveness and control of Crane Nuclear's program that has been established to implement the provisions of 10 CFR Part 21, "Reporting of Defects and Noncompliance," which establishes requirements for the implementation of Section 206 of the Energy Reorganization Act of 1974. The inspectors concluded that the control of Crane Nuclear's 10 CFR Part 21 and QA program related activities were generally acceptable with some exceptions that are discussed in the enclosed Notice of Violation (NOV), Notice of Nonconformance (NON), and NRC Inspection Report.

It was found that certain activities appeared to be in violation of NRC requirements. Specifically, a review of several 10 CFR Part 21 (Part 21) potential issues identified that *evaluations*, as defined in §21.3 of Part 21, were not being appropriately performed in all cases, and in one case caused Crane Nuclear to exceed the five working day requirement from the point of discovery for informing NRC licensees of *deviations*, in accordance with §21.21(b) of Part 21. The inspectors also identified that *evaluations*, controlled under your Part 21 program, were being performed to determine technical engineering aspects for the *deviation* related to the component or service instead of for the regulatory requirement. As defined in §21.3 of Part 21, *evaluation* means the process of determining whether a particular deviation could create a substantial hazard or determining whether a failure to comply is associated with a *substantial safety hazard*. One violation of Part 21 is cited in the enclosed NOV, and the circumstances surrounding the NOV are described in the enclosed report. Please note that you are required to respond to this letter and should follow the instructions specified in the enclosed NOV when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In addition, the NRC inspectors found one example where the implementation of your quality assurance program failed to meet NRC requirements imposed on you by your customers. Specifically, the inspectors determined Crane Nuclear incorrectly issued a Certificate of Conformance to the Kewaunee Nuclear Power Plant attesting that Crane Nuclear's training services complied with the requirements of 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." This nonconformance is cited in the enclosed NON, and the circumstances surrounding it are described in the enclosed

report. You are requested to respond to the nonconformance and should follow the instructions specified in the enclosed NON when preparing your response.

In accordance with 10 CFR 2.390 of the NRC's "Public inspections, exemptions, requests for withholding," a copy of this letter and its enclosures will be placed in the NRC's Public Document Room (PDR).

Sincerely,

(Original /s/ by Michael E. Mayfield)

Michael E. Mayfield, Director
Division of Engineering
Office of Nuclear Reactor Regulation

Docket No.: 99901358

Enclosures:
1. Notice of Violation
2. Notice of Nonconformance
3. Inspection Report 99901358/2006-201

cc w/encl: Mr. Stephen H. Fowler, QA Manager
Crane Nuclear, Incorporated
2825 Cobb International Boulevard
Kennesaw, Georgia 30152-4352

in the enclosed NON, and the circumstances surrounding it are described in the enclosed report. You are requested to respond to the nonconformance and should follow the instructions specified in the enclosed NON when preparing your response.

In accordance with 10 CFR 2.390 of the NRC's "Public inspections, exemptions, requests for withholding," a copy of this letter and its enclosures will be placed in the NRC's Public Document Room (PDR).

Sincerely,

(Original /s/ by Michael E. Mayfield)

Michael E. Mayfield, Director
Division of Engineering
Office of Nuclear Reactor Regulation

Docket No.: 99901358

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1. Notice of Violation
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cc w/encl: Mr. Stephen H. Fowler, QA Manager
Crane Nuclear, Incorporated
2825 Cobb International Boulevard
Kennesaw, Georgia 30152-4352

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NAME	JPetrosino	VHall	SDennis	GCwalina (JPetrosino for GC)	DThatcher	MMayfield
DATE	05/22/06	05/22/06	05/22/06	05/22/06	05/23/06	05/25/06

OFFICIAL RECORD COPY

NOTICE OF VIOLATION

Crane Nuclear, Incorporated
2825 Cobb International Boulevard
Kennesaw, Georgia 30152- 4352

Inspection Report 99901358/2006-201

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted from April 24 through April 27, 2006, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Section 21.21, "Notification of failure to comply or existence of a defect and its evaluation," of 10 CFR Part 21, requires, in part, each individual, or other entity subject to 10 CFR Part 21 to adopt appropriate procedures to (1) evaluate deviations and failures to comply to identify defects and failures to comply associated with substantial safety hazards as soon as practicable, and, except as provided in paragraph §21.21(a)(2) of 10 CFR Part 21, in all cases within 60 days of discovery, in order to identify a reportable defect or failure to comply that could create a substantial safety hazard, were it to remain uncorrected, and (2) ensure that if an evaluation of an identified deviation or failure to comply potentially associated with a substantial safety hazard cannot be completed within 60 days from discovery of the deviation or failure to comply, an interim report is prepared and submitted to the Commission through a director or responsible officer or designated person as discussed in §21.21(d)(5) . . .

(b) If the deviation or failure to comply is discovered by a supplier of basic components, or services associated with basic components, and the supplier determines that it does not have the capability to perform the evaluation to determine if a defect exists, then the supplier must inform the purchasers or affected licensees within five working days of this determination so that the purchasers or affected licensees may evaluate the deviation or failure to comply, pursuant to §21.21(a).

Contrary to the above, as of April 24, 2006:

Crane Nuclear, Incorporated, (Crane Nuclear) failed to perform the required evaluation, as defined in §21.3, of a deviation that was identified in Crane Nuclear's Corrective Action Report 157, regarding strain gages used in Crane Nuclear's Easy Torque Thrust™ Sensors. Crane noted that the gages had torque gage factors outside of their original range, but did not correctly characterize this anomaly as a deviation. As a result, Crane Nuclear did not perform the required Part 21 evaluation, or inform their customers of the deviation pursuant to the requirements of Part 21. Violation 99901358/2006-201-01.

This is a Severity Level IV violation (Supplement VII).

Pursuant to the provisions of 10 CFR 2.201, "Notice of Violation," Crane Nuclear, Incorporated is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001, with a copy to the Director, Division of Engineering, Office of Nuclear Reactor Regulation, within 30 days of the date of the letter transmitting this Notice of Violation.

ENCLOSURE 1

This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. Where good cause is shown, consideration will be given to extending the response time.

Dated at Rockville, Maryland this 25th day of May 2006.

NOTICE OF NONCONFORMANCE

Crane Nuclear, Incorporated
2825 Cobb International Boulevard
Kennesaw, Georgia 30152- 4352

Inspection Report 99901358/2006-201

Based on the results of an inspection conducted on April 24 through April 27, 2006, it appeared that certain Crane Nuclear, Incorporated (Crane Nuclear) activities were not conducted in accordance with NRC requirements which were contractually imposed upon Crane Nuclear by NRC licensees.

Criterion VII, "Control of Purchased Material, Equipment, and Services," of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, requires, in part:

> . . .measures shall be established to assure that purchased material, equipment, and services, whether purchased directly or through contractors and subcontractors, conform to the procurement documents. These measures shall include provisions, as appropriate, for source evaluation and selection, objective evidence of quality furnished by the contractor or subcontractor. . .Documentary evidence that material and equipment conform to the procurement requirements shall be available at the nuclear power plant or fuel reprocessing plant site prior to installation or use of such material and equipment. This documentary evidence shall be retained at the nuclear power plant or fuel reprocessing plant site and shall be sufficient to identify the specific requirements, such as codes, standards, or specifications, met by the purchased material and equipment . . .

Contrary to the above, a Crane Nuclear "Certificate of Conformance (CofC)," dated July 8, 2004, provided documented objective evidence attesting to Nuclear Management Company (NMC), regarding NMC Purchase Order (PO) P201345, that training services were in compliance with the PO, when in fact they were not. Crane Nuclear provided "air-operated valve data acquisition and basic analysis" training services which were not in compliance with the NMC-imposed safety-related contractual 10 CFR 50 Appendix B requirement.

Please provide a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001, with a copy to the Director, Division of Engineering, Office of Nuclear Reactor Regulation, 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: (1) a description of steps that have been or will be taken to correct this item; (2) a description of steps that have been or will be taken to prevent recurrence; and (3) the dates your corrective action and preventive measures were or will be completed.

Dated at Rockville, Maryland this 25th day of May 2006.

ENCLOSURE 2

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
DIVISION OF ENGINEERING

Report No: 99901358/2006-201

Organization: Crane Nuclear, Incorporated
2825 Cobb International Boulevard
Kennesaw, Georgia 30152- 4352

Vendor Contact: Mr. Stephen H. Fowler
Quality Assurance Manager
Crane Nuclear, Incorporated
(770) 429-4602

Nuclear Industry: Crane Nuclear, Incorporated (Crane Nuclear) is part of the Valve Services Business Unit within the Fluid Handling Business Segment of the Crane Corporation (Crane). Crane Nuclear provides valve products and services to the domestic and international nuclear power Industry. Products and services include nuclear-grade and safety-related valves and valve parts, valve testing products, engineering, repair and testing services.

Inspection Dates: April 24-27, 2006

Inspection Team Leader:	***(Original /s/ by J. Petrosino)***	***05/22/06***
	Joseph J. Petrosino, DE/NRR	Date
Inspector:	***(Original /s/ by S. Dennis)***	***05/22/06***
	Steve Dennis, DE/NRR	Date
Inspector:	***(Original /s/ by V. E. Hall)***	***05/22/06***
	Victor E. Hall, DE/NRR	Date
Approved By:	***(Original /s/ by D. F. Thatcher)***	***05/23/06***
	Dale F. Thatcher Quality & Vendor Branch A Division of Engineering (DE) Office of Nuclear Reactor Regulation (NRR)	Date

ENCLOSURE 3

1.0 INSPECTION SUMMARY:

The purpose of this inspection was to evaluate selected portions of the quality assurance (QA) and 10 CFR Part 21 (Part 21) controls that Crane Nuclear has established and implemented. The inspection was conducted at Crane Nuclear's facility in Kennesaw, Georgia. The NRC inspection bases were:

- Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Part 50 of Title 10 of the Code of Federal Regulations (Appendix B), and

- 10 CFR Part 21, "Reporting of Defects and Noncompliance."

During this inspection, violations of NRC requirements were identified and are discussed in Section 3.1 of this report. Additionally, one instance where Crane Nuclear failed to conform to NRC requirements contractually imposed upon them by NRC licensees was identified and is also discussed herein.

2.0 STATUS OF PREVIOUS INSPECTION FINDINGS

There were no previous NRC inspections performed at Crane Nuclear's facility in Kennesaw, Georgia, prior to this inspection.

3.0 INSPECTION FINDINGS AND OTHER COMMENTS:

3.1 10 CFR PART 21

3.1.a. Inspection Scope

The NRC inspectors reviewed Crane Nuclear's Part 21 procedure, Quality Assurance procedure (QAP) 19.0, "Reporting of Defects and Noncompliance," Revision 9, that was adopted to implement the provisions of Part 21. Additionally, the NRC inspectors reviewed documents, such as nonconformance reports (NCRs), and corrective action reports (CARs) associated with the provisions of Part 21 that were controlled in accordance with the Crane Nuclear quality program.

3.1.b. Observations and Findings

3.1.b.1. Procedure QAP-19

The inspectors reviewed QAP 19.0 and determined that the procedure generally addressed the salient points of 10 CFR Part 21 and could assist effective implementation of the provisions of Part 21 with some clarification of the procedure. For example, the inspectors identified that *evaluations*, controlled under Crane Nuclear's Part 21 program, were being performed to decide upon technical engineering aspects for the deviation related to the component or service instead of for the regulatory requirement for determining whether a particular deviation could create a substantial safety hazard, determining whether a failure to comply is associated with a substantial safety hazard, or whether Crane Nuclear had the capability to perform the *evaluation* to determine if a defect exists. Crane Nuclear QAP-19.0 was found to have an incorrect definition for *evaluation*. QAP-19.0 was found by the inspectors to use the term "technical evaluation" instead of the §21.3 term of evaluation. 10 CFR Part 21.3 states,

"evaluation means the process of determining whether a particular deviation could create a substantial hazard or determining whether a failure to comply is associated with a substantial safety hazard."

Therefore, the inspectors determined that although the procedure was generally satisfactory, the Part 21 procedure required some clarification to ensure effective implementation of the provisions of Part 21. The inspectors and QA Manager discussed the potential conflicts that could be caused by incomplete definitions in QAP-19.0 and the required clarifications. The QA Manager revised QAP-19.0 prior to the exit meeting and the inspectors found the procedure satisfactory.

3.1.b.2 Corrective Action and Nonconformance Programs

The NRC inspectors reviewed Crane Nuclear's Corrective Action and Nonconformance programs, including policies, procedures and implementation since 2004. Crane Nuclear's Corrective Action program is described in Section 16, "Corrective Action," of its Quality Assurance Manual (QAM)-1, and Crane Nuclear's Nonconformance Program is described in Section 15, "Nonconforming Materials, Parts, or Components," of QAM-1. The inspectors reviewed Corrective Action reporting, tracking, and resolution, and verified that measures were established to assess the applicability of 10 CFR Part 21.

The NRC inspectors reviewed the entire population of Crane Nuclear CARs and NCRs for approximately the last two years. The inspectors determined that the CAR forms which Crane Nuclear used to control the CAR process addressed root cause/effect on other items or jobs, corrective action, preventative action, applicability of Part 21 screening, problem cause, training disposition, Part 21 screening when applicable, and technical evaluation when applicable.

Additionally, the inspectors determined that the NCR forms which Crane Nuclear used to control its NCR process addressed the nonconformance description and details, probable cause, disposition/corrective action, applicability of Part 21 screening, training disposition, and the technical evaluation when applicable. Based on review and assessment of Crane Nuclear's CAR and NCR program control, the inspectors concluded this area was generally satisfactorily controlled.

However, the NRC inspector's review characterized two anomalies in Crane Nuclear's control of this area, and consequently characterized two violations of 10 CFR Part 21, one regarding CAR 157 and one regarding NCR-218. The violation regarding NCR-218 will not be cited due to the minor nature and because Crane Nuclear notified applicable NRC licensees through issuance of a service bulletin.

CAR 157 described an issue regarding strain gages used in a Crane Nuclear's Easy Torque Thrust™ (ETT) Sensor. The "Description of Condition" in CAR 157 stated in part:

> Strain gages used in the ETT product have gage factors that are used to scale the instrument reading. When the product was released in 1996, it was assumed that the gage factors would always be the same. The possibility of gage factor changes when subsequent lots of gages were purchased was noted in 1999 and the accuracy statement as developed assuming that the gages with factors in the original range would be used . . . In 2003, new gages were purchased that had torque gage

factors outside of the original range. Several lots have been received since with these out of range gage factors.

Crane Nuclear stated in their Part 21 screening form for this issue: “analysis shows that the bias error introduced by the change in torque strain gage factors is within the bounds of the original error analysis and does not constitute a deviation.” However, the inspectors note that §21.3 of Part 21 states *“deviation* means a departure from the technical requirements included in a procurement document.”

Although Crane Nuclear failed to identify this issue as a *deviation*, they performed an engineering analysis (instead of the required Part 21 *evaluation*) to determine the effect on accuracy of their ETT Sensor, and provided that information to their customers in the form of a May 23, 2005, Hot Tip: HT-2005-001, "Easy Torque Thrust™ Sensor Gage Factors." However, the inspectors determined that in this case, the gage factor variation was a departure from the technical requirements in the original procurement document. Therefore, the Crane Nuclear identified departure from the technical requirements was a *deviation* and subject to *evaluation* or if Crane Nuclear did not have the capability to evaluate the deviation as discussed in §21.21(b) of Part 21, then Crane Nuclear was required to inform its customers within five working days of the *discovery* of the *deviation*.

The inspectors determined that Crane Nuclear did not perform the required Part 21 evaluation or inform their customers of the deviation so its customers could cause an evaluation to be performed. Although Crane Nuclear’s customers were informed of the technical aspect of the matter through issuance of Hot Tip-2005-001, the NRC licensees were not made aware of their responsibility to evaluate the deviation pursuant to Part 21. Violation 99901358/2006-201-01 was identified in this area.

NCR-218, June 1, 2004, described a Duke Power question about the Black Diamond Engineering (BDE) software analysis of an air-operated valve (AOV) test report stating that the report was improperly calculated and reported. NCR-218 stated that the BDE Report incorrectly added a friction force to the reported seat load, spring only field (Note: Due to proprietary concerns, the technical issue will not be discussed in detail). As a result of multiple customer applicability, Crane Nuclear developed and issued a Customer Service Bulletin (CSB)-2004-01, “Seat Load, Spring Only Calculation.” Crane Nuclear determined on June 1, 2004, using its Part 21 screening form that the issue was applicable to Part 21 and was a *deviation* required to be evaluated.

Although Crane Nuclear performed an engineering analysis and determined that its customers should receive the service bulletin, the inspectors determined Crane Nuclear did not perform the Part 21 required *evaluation* to determine if a *substantial safety hazard* or *defect* existed, nor did Crane Nuclear inform its customers of the *deviation* within five working days from the point of *discovery* which occurred on June 1, 2004. Customers were informed of the *deviation* after Crane Nuclear mailed its CSB-2004-01 on June 14, 2004. As defined in §21.3 of Part 21, *“discovery”* “means the completion of the documentation first identifying the existence of a deviation or failure to comply potentially associated with a *substantial safety hazard* within the *evaluation* procedures discussed in §21.21(a)” of Part 21.

Although a violation was characterized in this area, it will not be cited due to the minor nature of the violation and recognition of Crane Nuclear's service bulletin transmittal regarding the matter.

3.1.c. Conclusions

The inspectors determined the Part 21 program control by Crane Nuclear was generally acceptable with certain exceptions. Those exceptions included two violations of 10 CFR Part 21 that are discussed above (one violation is non-cited) and the inspectors also identified that QAP-19.0 required some clarification and therefore, conducted discussions with Crane Nuclear staff to talk about the salient points of Part 21 which ensure effective implementation of the provisions of Part 21. It was concluded that Crane Nuclear's CAR and NCR program control was generally acceptable and appropriately interfaced with 10 CFR Part 21.

3.2 NRC Licensee Purchase Orders and Certification of Requirements

3.2.a. Inspection Scope

The NRC inspectors reviewed a sample of NRC licensee purchase order (POs) packages to examine the scope of safety-related (S/R) products and services that Crane Nuclear provides to the nuclear industry. The inspectors reviewed PO packages for Crane Nuclear products such as, Easy Torque Thrust™ (ETT) valve diagnostic equipment, Sensors, valve C-Clamps, training, and on-site valve maintenance, testing, and support. The NRC inspectors reviewed PO packages back to the 2004 time period to determine compliance with QAP 4.0, "Procurement Document Control," and section 4.3 "Procurement Document Review" of the Crane Nuclear QAM-1 quality program.

3.2.b. Observations and Findings

The inspectors' review determined that the PO packages were generally in compliance with the quality program requirements. The inspectors observed that Crane Nuclear's incoming customer sales order form included a checkbox for Part 21 and Appendix B applicability and each PO package also included a PO review cover sheet and a PO checklist. These PO package worksheets appeared to assure that QA and Part 21 requirements were determined and addressed. All S/R PO review cover sheets reviewed by the inspectors invoked QAM-1 and in some cases, also invoked the licensee's PO and QA requirements. For example, when performing on-site valve maintenance, Crane Nuclear may adopt the licensee's QA requirements, as specified in the purchase order.

The NRC inspectors reviewed QA packages associated with the POs which included Certificates of Conformance (CofCs) and/or Certificates of Calibration of Measuring and Test Equipment. Section 4.4 "Documentation Requirements" of Crane Nuclear procedure QAM-1 states:

> *When items or services are procured, documentation is obtained from the supplier to ensure their quality. Documentation requirements (e.g. Certificate of Conformance, Certified Mill Test Report) are specified in the purchase order.*

The NRC inspectors also noted that section 2.1 "General" of QAM-1 stated in part, that the QA Manager or his designated representative is responsible for the completion of Certificates of

Conformance and/or Compliance. The inspectors found examples of signed certificates in the sample of QA Packages reviewed. Additionally, the NRC inspectors reviewed a sample of documentation associated with the Certificates and verified that objective evidence existed (i.e., the work met standards and requirements specified in the PO) and that the requirements were met in all packages reviewed except one CofC associated with Nuclear Management Company (NMC) PO P-201345, dated April 1, 2004. NMC PO P-201345, contractually required Crane Nuclear to provide training services. That licensee PO required Crane Nuclear "to provide offsite AOV data acquisition & Analysis training at Crane Nuclear for three I&C Technicians for the week of June 21 through June 25, 2004." The NMC PO imposed requirements of 10 CFR Part 50, Appendix B and 10 CFR Part 21.

Previous discussions identified that Crane Nuclear staff did not control its training services within its 10 CFR Part 50, Appendix B quality program. The Crane Nuclear staff explained they controlled the qualification and certification of its Crane Nuclear Instructors under the QAM-1 (10 CFR Part 50, Appendix B) quality program, but stated none of its training services are controlled within or under a 10 CFR Part 50, Appendix B QA program. As a result of those discussions, the inspectors asked to see an example of a CofC provided to an NRC licensee for training services. The inspectors were provided with a Crane Nuclear Certificate of Conformance to NMC-Kewaunee Nuclear Power Plant, dated July 8, 2004. That CofC stated:

> Crane Nuclear, Incorporated hereby certifies that the training services supplied and provided to the listed personnel, meets all of the requirements of NMC [purchase order] P-201345, the Crane Nuclear Sales order 103628 and the Crane Nuclear Quality Assurance Manual (QAM-1), Revision 17, dated March 9, 2004, which meets the requirements of 10 CFR50, Appendix B and ASME NQA-1.

Further discussions and review of the P-201345 PO package identified a Crane Nuclear PO addendum titled, "Special Conditions-Training." The Crane Nuclear PO package addendum provided various additional "Training Provisions" including one exception which stated "Crane Nuclear supplied training materials are not quality documents and the provisions of 10 CFR Part 21 shall not apply." Other PO training service packages were found to contain the same special conditions-training addendum with the same exemption of Part 21 provisions. The NRC inspectors explained to Crane Nuclear personnel that contractual exception to the provisions of 10 CFR Part 21 cannot be taken if a basic component or service is being procured or unique nuclear safety-related requirements are applicable to the NRC licensee procurement.

The inspectors reviewed other Crane Nuclear training service PO packages and no other CofC certifications were identified which certified compliance to QAM-1 or 10 CFR Part 50, Appendix B QA unique requirements. The QA Manager stated that the CofC from NMC's P-201345 procurement was the only CofC issued. The QA Manager believed that it was an oversight. However, the CofC was provided to the NMC and it provided objective evidence to the NRC licensee that its PO requirements were in compliance. Nonconformance 99901358/2006-201-02 was identified in this area.

3.2.c. Conclusions

The inspector determined that Crane Nuclear's control of NRC licensee POs and certificates were generally acceptable except for the one CofC discussed above.

3.3 PERSONNEL QUALIFICATION

3.3.a. Inspection Scope

The NRC inspectors reviewed Crane Nuclear's documents and records related to personnel qualification to determine the adequacy of Crane Nuclear's quality program control in this area.

3.3.b. Observations and Findings

The inspectors reviewed Crane Nuclear's QA manuals and procedures regarding personnel qualification and certification including Section 2.6 "Qualification and Certification of Personnel" of Crane Nuclear's QAM-1. The NRC inspectors reviewed a sample of personnel files against the requirements contained in QAP-2.0, Rev.15 "Personnel Qualification Procedure." The inspectors noted that Crane Nuclear keeps separate records for QA personnel. The inspectors verified that certification and re-certification records were current, reviewed training and examination records, and reviewed personnel qualifications. The inspectors also verified that Crane Nuclear met its QA program requirements for personnel certifications of test engineers, installers, and technicians.

However, the inspectors observed that the requirement for a periodic proficiency and performance evaluation at twelve-month intervals, as stated, in QAP-2.0, step 6.1.5, was exceeded by approximately one month in a large sample of personnel certificates reviewed. Based on discussions with the QA manager and a review of the individual personnel files, no work or personnel qualifications were adversely affected by this lapse in certification documentation and therefore the anomaly was not cited as a noncompliance.

3.3.c. Conclusions

The inspectors found that Crane Nuclear's procedures for qualification and certification of personnel were generally satisfactory and met the intent of the requirements. The NRC inspectors did not identify any significant issues or concerns in this area.

4.0 MANAGEMENT MEETINGS AND PERSONNEL CONTACTED

4.1 Entrance and Exit Meetings:

In the entrance meeting on April 24, 2006, the NRC Inspectors discussed the scope of the inspection, outlined the areas to be inspected, and established interfaces with Crane's Manager of Quality Assurance. During the exit meeting on April 27, 2006, the NRC Inspectors discussed the tentative findings and concerns with Crane's staff.

4.2 Personnel Contacted:

K. Kelhoffer	Crane Nuclear, President
P. Anderson	Crane Nuclear, Principal Applications Engineer
R. Carr	Crane Nuclear, Manager, Product Development
S. Fowler	Crane Nuclear, Manager, Quality Assurance
D. Graf	Crane Nuclear, Lead Engineer, Product Development
G. Hill	Crane Nuclear, General Manager, Testing Products
W. Prokop	Crane Nuclear, Vice President, Operations and Sales
C. Quinn	Crane Nuclear, Director, Marketing & Customer Service
M. Travis	Crane Nuclear, Contracts