

**Official Use Only - Security-Related Information**

July 5, 2007

Mr. Christopher M. Crane  
President and Chief Nuclear Officer  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2, NRC  
MATERIAL CONTROL AND ACCOUNTING TI 2515/154 PHASE III  
INSPECTION REPORT 05000254/2007402;05000265/2007402

Dear Mr. Crane:

From April 23 through May 22, 2007, the U.S. Nuclear Regulatory Commission (NRC) conducted a material control and accounting safeguards program inspection at your Quad Cities Nuclear Power Station, Units 1 and 2. The inspection was conducted under Phase III of Temporary Instruction (TI) 2515/154. The enclosed report documents the inspection results, which were discussed with members of your staff during the debrief on April 27, 2007, and an exit by telephone on May 22, 2007.

This inspection examined activities conducted under your license as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed storage of special nuclear material in the spent fuel pool, and interviewed personnel. Areas examined during the inspection included physical inventory and accounting records.

**EXEMPT FROM PUBLIC DISCLOSURE**

May be exempt from public release under the Freedom of Information Act (5 U.S.C. 552)

Exemption number: 5  
Nuclear Regulatory Commission review required before public release.

Christine A. Lipa, RIII/DRP/BR4  
Name and organization of person making determination.

Date of determination: 06/1/2007

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Based on the results of this inspection, no findings of significance were identified. However, two licensee identified violations, one of which was determined to be of very low safety significance and one which was determined to be of minor significance, are listed in paragraph 4OA7 of this report. Minor violations are not subject to enforcement, and the other violation is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A of the Enforcement Policy. If you contest the violations or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Quad Cities Nuclear Power Station.

Since the NCV involved fuel pellets which were separated from their fuel pin in 1984 and which were re-identified and located in 2007, we are requesting that you submit to us a description of the actions you have taken to identify, locate, and secure the four pellets since your response to Bulletin 2005-001 in May 2005. Also, include the results of your review of nonfuel SNM that was not inventoried before 1991, and any inventory discrepancies and corrective actions. Your staff indicated that these activities would be completed in 2007. This information should be submitted as a supplement to Bulletin 2005-001.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). However, because of the sensitive information contained in the enclosure, and in accordance with 10 CFR 2.390, a copy of this letter's enclosure will not be available for public inspection.

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C. Crane

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In accordance with 10 CFR 2.390(b)(1)(ii), the NRC is waiving the affidavit requirements for your response, if any. This practice will ensure that your response will not be made available electronically for public inspection in the NRC Public Document Room or from NRC's document system ADAMS. If Safeguards Information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21. Otherwise, mark your entire response "Security-Related Information - Withhold Under 10 CFR 2.390" and follow the instructions for withholding in 10 CFR 2.390(b)(1).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

*/RA/*

Christine A. Lipa, Chief  
Branch 4  
Division of Reactor Projects

Docket Nos. 50-254; 50-265  
License Nos. DPR-29; DPR-30

Enclosure: Inspection Report 05000254/2007402; 05000265/2007402  
w/Attachment: Supplemental Information

cc w/encl: Site Vice President - Quad Cities Nuclear Power Station  
State Liaison Officer, State of Illinois  
State Liaison Officer, State of Iowa

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cc w/encl: Site Vice President - Quad Cities Nuclear Power Station  
State Liaison Officer, State of Illinois  
State Liaison Officer, State of Iowa

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Letter To C. Crane from C. Lipa dated July 5, 2007

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INSPECTION REPORT 05000254/2007402;05000265/2007402

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Branch Chief

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