

July 18, 2007

Mr. Christopher M. Crane
President and CNO
Exelon Nuclear
Exelon Generation Company, LLC
200 Exelon Way
Kennett Square, PA 19348

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION - NRC MATERIAL CONTROL
AND ACCOUNTING PROGRAM INSPECTION REPORT 05000277/2007201
AND 05000278/2007201

Dear Mr. Crane:

On June 14, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed a material control and accounting (MC&A) safeguards program inspection at your Peach Bottom Atomic Power Station Units 2 and 3. The enclosed inspection report documents the inspection findings, which were discussed during an exit meeting on that date with Mr. Michael Massaro, and other members of his staff.

The inspection examined activities conducted under your license as they relate to safety, security, and compliance with the Commission's rules and regulations and with the conditions of your license. Areas examined during the inspection included: MC&A management and procedures, fuel assembly and fuel rod histories, self assessments, spent fuel pool operations, annual physical inventories, and special nuclear material (SNM) related corrective actions. Through sampling techniques, the inspection verified the accuracy of the location of the spent fuel assemblies in the spent fuel pools.

Based on the results of this inspection, no findings of significance were identified.

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 Public Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). However, because of the security-related concerns contained in the enclosure, and in accordance with 10 CFR 2.390, this letter's enclosure will not be available for public inspection.

When separated from the Enclosure, this document is DECONTROLLED.

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 NRCs 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 report, please contact Martha Williams at (301) 415-7878 or Dori Votolato at (301) 415-7633.

Sincerely,

/RA/

Barry C. Westreich, Chief
Reactor Oversight Branch
Division of Security Operations
Office of Nuclear Security and Incident Response

Docket Nos.: 50-277 and 278
License Nos.: DPR-44 and DPR-56

Enclosure: MC&A Inspection Report 05000277/2007201 and 05000278/2007201
w/Attachment: Supplemental Information

C. Crane

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C. Crane

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cc w/enclosure:

David Allard, CHP, Director
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Dept. of Environmental Protection
P.O. Box 8469
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cc w/o enclosure:

Chief Operating Officer, Exelon Generation Company, LLC
Site Vice President, Peach Bottom Atomic Power Station
Plant Manager, Peach Bottom Atomic Power Station
Regulatory Assurance Manager - Peach Bottom