UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

April 14, 2020

Docket No. 07200029 License No. DPR-44 and DPR-56

Mr. Bryan C. Hanson
Senior Vice President, Exelon Generation Company, LLC
President and Chief Nuclear Officer,
Exelon Nuclear Exelon Generation Company, LLC
4300 Winfield Road Warrenville, IL 60555

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION – NRC INSPECTION REPORT NO. 07200029/2019001

Dear Mr. Hanson:

On January 7, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the Peach Bottom Atomic Power Station (Peach Bottom) Independent Spent Fuel Storage Installation (ISFSI) pre-operational activities. On-site inspections were completed on January 7, 2020. In-office reviews of information supplied by Exelon were also performed during the inspection period from February 4, 2019 to January 7, 2020. The purpose of the inspection was to determine whether ISFSI activities were conducted safely and in accordance with NRC requirements. The inspection consisted of observations by the inspectors, interviews with personnel, and a review of procedures and records. The results of this inspection were discussed with Patrick Navin, Site Vice-President, and other members of the Exelon staff on March 24,2020, and are described in the enclosed report. No findings of safety significance were identified.

In accordance with 10 Code of Federal Regulations (CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure, and your response (if any) will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response, if any, should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select Radioactive Waste; Decommissioning of Nuclear Facilities; then Regulations, Guidance and Communications. The current Enforcement Policy is included on the NRC's website at www.nrc.gov; select About NRC, Organizations & Functions; Office of Enforcement; Enforcement documents; then Enforcement Policy (Under 'Related Information'). You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

No reply to this letter is required. Please contact John Nicholson at 610-337-5236 if you have any questions regarding this matter.

Sincerely,

/RA/

Anthony Dimitriadis
Branch Chief
Decommissioning and Technical Support Branch
Division of Nuclear Materials Safety
Region 1

Docket No: 72-00029
License No: DPR-44,
DPR-56

Enclosure: Inspection Report 07200029/2019001
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

DOCUMENT NAME: G:/DIRHP/2020 ISFSI PB Pad Inspection.docx

SUNSI Review Complete: J.Nicholson

After declaring this document An Official Agency Record it **will** be released to the Public.

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No:	072-00029
License Nos:	DPR-44 and DPR-56
Report No:	07200029/2019001
Licensee:	Exelon Generation Company, LLC
Facility:	Peach Bottom Atomic Power Station, Units 2 and 3
Location:	Delta, Pennsylvania
Dates:	February 4, 2019 to January 7, 2020
Inspectors:	E. Andrews, Health Physicist Decommissioning and Technical Support Branch Division of Nuclear Materials Safety, Region 1 B. DeBoer, Health Physicist Decommissioning and Technical Support Branch Division of Nuclear Materials Safety, Region 1 J. Nicholson, Senior Health Physicist Decommissioning and Technical Support Branch Division of Nuclear Materials Safety, Region 1 K. Warner, Senior Health Physicist Decommissioning and Technical Support Branch Division of Nuclear Materials Safety, Region 1
Approved by:	Anthony Dimitriadis, Chief Decommissioning and Technical Support Branch Division of Nuclear Materials Safety, Region 1

Enclosure

EXECUTIVE SUMMARY

Exelon Generation Company, LLC
Peach Bottom Atomic Power Station
NRC Inspection Report No. 07200029/2019001

This report covered on-site inspections and in-office reviews by Nuclear Regulatory Commission regional based inspectors of activities related to Peach Bottom Atomic Power Station (Peach Bottom) pre-operational activities of dry cask storage of spent fuel during the inspection period from February 4, 2019 to January 7, 2020. The inspection included a review of the structural analysis and observation of the construction of the second independent spent fuel storage installation (ISFSI) storage pad at Peach Bottom. The inspection consisted of observations by the inspectors, interviews with Exelon personnel, a review of procedures, calculations and records, and ISFSI pad walk-downs. The NRC's program for overseeing the safe operation of dry storage of spent fuel at an ISFSI is described in Inspection Manual Chapter 2690, "Inspection Program for Dry Storage of Spent Reactor Fuel at Independent Spent Fuel Storage Installations and for 10 CFR Part 71 Transportation Packagings."

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

REPORT DETAILS

1.0 Independent Spent Fuel Storage Installation

1.1 Onsite Fabrication of Components and Construction of an ISFSI (60853)

a. Inspection Scope

The inspectors conducted a review of licensee and vendor activities in preparation for the concrete placement for the east pad of the Independent Spent Fuel Storage Installation (ISFSI) which will store spent fuel previously generated by the licensee using the Holtec HI-STORM dry cask storage system. The inspectors conducted walked downs of the construction area of the ISFSI pad and examined the rebar installation to verify that the rebar size, spacing, splice length, and concrete coverage on the top, side, and bottom complied with licensee-approved drawings, specifications, procedures, and other associated documents, and to verify compliance with applicable codes, the Certificate of Compliance, and Technical Specifications. Additionally, the inspectors evaluated the concrete formwork installation for depth, straightness, and horizontal bracing to verify the overall dimensions and orientation for compliance with the licensee-approved drawings. The inspectors interviewed licensee and contract personnel to verify knowledge of the planned work. The inspectors observed the actual concrete placement and vibration of the concrete placed for the ISFSI slab. The observations included tests for concrete slump and air content, temperature measurements, and the collection and preparation of cylinder samples for compression tests, to verify that the work was implemented in accordance with approved specifications and procedures. The inspectors later returned to the freshly placed pad to observe the finishing of the ISFSI pad surface. Following completion of the 7-day and 28-day compression tests by an independent laboratory, the inspectors reviewed the results to verify that the acceptance criteria were met. The inspectors reviewed a sample of corrective action issue reports that Exelon identified and entered into the corrective action program. The inspectors reviewed these issues to verify an appropriate threshold for identifying issues and to evaluate the effectiveness of corrective actions.

a. Findings

No findings of significance were identified.

1.2 Review of 10 CFR 72.212(b) Evaluations (IP 60856)

a. Inspection Scope

The inspectors performed an in-office review of ISFSI pad design documentation to determine if the storage pad would adequately support both static and dynamic loads, as required by 10 CFR 72.212(b)(5)(ii). The inspectors reviewed and verified that the assumptions the licensee used in the seismic and liquefaction analyses for the storage pad were appropriate. The inspectors reviewed the licensee's conclusions about the acceptability of the storage pad design with respect to the site's hydrology, geology, and seismology. The inspectors also determined that the various design loads were in accordance with Peach Bottom's Final Safety Analysis Report.

b. Findings

No findings of significance were identified.

3.0 Exit Meeting

The inspection results were discussed with Patrick Navin, Site Vice-President, and other members of the Exelon staff, on March 24, 2020. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTARY INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

D. Dullum, Regulatory Affairs
A. Stathes, Senior Project Manager

ITEMS OPENED, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Condition Reports
AR 04328158 ISFSI Expansion Pad Concrete Compressive Strength Variance
AR 04311633 ISFSI Pad Section 3 Doesn't Meet Specifications

Drawings
C-10800 Sheet 1
C-10900 Sheet 1, ISFSI Pad General Notes
C-10900 Sheet 2, ISFSI Pad Geotechnical Notes
C-10900 Sheet 3, ISFSI Pad Plan, Sections and Details

Miscellaneous
EC 618375
PS-1214, Peach Bottom ISFSI Expansion – Seismic Soil Liquefaction Evaluation of ISFSI Pad, Revision 0
PS-1219, Peach Bottom ISFSI Expansion – Strain-Dependent Soil Properties for ISFSI Pad, Revision 0
PS-1220, Peach Bottom ISFSI Expansion – Structure Soil Structure Interaction Analysis for ISFSI Pad"
PS-1221, Peach Bottom ISFSI Expansion – ISFSI Pad Design, Revision 0
Specification P-3960, ISFSI Pad, Apron, Retaining Wall, Turning Pads, Ramp, Fabrication Pad and Concrete Road Structures, dated December 19, 2017

LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access and Management System
CFR	Code of Federal Regulations
ISFSI	Independent Spent Fuel Storage Installation
NRC	U.S. Nuclear Regulatory Commission