



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

February 25, 2016

MEMORANDUM TO: Douglas A. Broaddus, Chief  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

FROM: Richard B. Ennis, Senior Project Manager */RA/*  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3,  
DRAFT REQUEST FOR ADDITIONAL INFORMATION (CAC NOS.  
MF7184 AND MF7185)

The attached draft request for additional information (RAI) was transmitted on February 18, 2016, to Ms. Stephanie Hanson of Exelon Generation Company, LLC (Exelon, the licensee). This information was transmitted to facilitate a conference call in order to clarify the licensee's amendment request for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, dated December 15, 2015. The proposed amendment would reduce the reactor steam dome pressure stated in Technical Specification (TS) 2.1.1 for the reactor core safety limits. The proposed change addresses a Title 10 of the *Code of Federal Regulations* (10 CFR), Part 21 issue concerning the potential to violate the safety limits during a pressure regulator failure maximum demand (open) (PRFO) transient.

The draft RAI was sent to Exelon to ensure that the questions are understandable, the regulatory basis for the questions is clear, and to determine if the information was previously docketed.

This memorandum and the attachment do not convey or represent an NRC staff position regarding the licensee's request.

Docket Nos. 50-277 and 50-278

Attachment: Draft RAI

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DATE	2/25/16

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DRAFT REQUEST FOR ADDITIONAL INFORMATION

REGARDING PROPOSED LICENSE AMENDMENT

REDUCE STEAM DOME PRESSURE SPECIFIED IN REACTOR CORE SAFETY LIMITS

EXELON GENERATION COMPANY, LLC

PEACH BOTTOM ATOMIC POWER STATION - UNITS 2 AND 3

DOCKET NOS. 50-277 AND 50-278

By letter dated December 15, 2015 (ADAMS Accession No. ML15349A800), Exelon Generation Company, LLC (Exelon, the licensee) submitted a license amendment request (LAR) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. The proposed amendment would reduce the reactor steam dome pressure stated in Technical Specification (TS) 2.1.1 for the reactor core safety limits. The proposed change addresses a Title 10 of the *Code of Federal Regulations* (10 CFR), Part 21 issue concerning the potential to violate the safety limits during a pressure regulator failure maximum demand (open) (PRFO) transient.

The Nuclear Regulatory Commission (NRC) staff has reviewed the information the licensee provided that supports the proposed amendment and would like to discuss the following issues to clarify the submittal.

**Division of Operating Reactor Operation (DORL)**

Reviewer: Rick Ennis

**DORL-RAI-1**

The licensee proposes to reduce the reactor steam dome pressure specified in TS 2.1.1.1 and TS 2.1.1.2 from 785 pounds per square inch gauge (psig) to 685 psig based on the lower-bound pressure for the critical power correlation for the GNF2 fuel currently used in the PBAPS, Units 2 and 3 cores. The licensee's application references Global Nuclear Fuel (GNF) reports NEDC-33270P and NEDC-33292P as the basis supporting the proposed change.

Section 3.8.3 of GNF report NEDC-33270P discusses the critical power correlation for GNF2 fuel (i.e., GEXL17 correlation). This section includes the pressure range over which the GEXL17 correlation is valid for GNF2 fuel consistent with the information provided in Table 5-4 of GNF2 report NEDC-33292P. As discussed in Section 3.0 of Attachment 1 of the licensee's application, the lower bound pressure limit for the GEXL17 correlation is 700 pounds per square inch atmospheric (psia). Converting to psig, this lower bound pressure is approximately 685.3 psig. As such, the 685 psig value specified in the proposed TS change is slightly outside the pressure range in which the GEXL17 correlation is valid for GNF2 fuel. Please provide further justification for the proposed 685 psig value or propose a revised pressure value for this TS change that is supported by the GEXL17 correlation.