

Exelon Nuclear
200 Exelon Way
Kennett Square, PA 19348

www.exeloncorp.com

October 16, 2002

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Peach Bottom Atomic Power Station, Units 2 & 3
Facility Operating License Nos. DPR-44 and DPR-56
NRC Docket Nos. 50-277 and 50-278

SUBJECT: Request for Additional Information
Appendix K Measurement Uncertainty Recovery Power Uprate
(License Amendment Request 01-01190)

- REFERENCE:**
1. Letter from Exelon to US NRC, dated May 24, 2002, "License Amendment Request 01-01190, Power Uprate Request for Appendix K Measurement Uncertainty Recapture"
 2. Letter from US NRC to C. L. Terry (Texas Utilities Electric), "Comanche Peak Steam Electric Station, Units 1 & 2 – Review of Caldon Engineering Topical Report ER 80P, "Improving Thermal Power Accuracy and Plant Safety While Increasing Power Level Using the LEFMvTM System", dated March 8, 1999
 3. Letter from Exelon to US NRC, dated September 11, 2002, "Response to the Request for Additional Information Regarding License Amendment Request 01-01190, Power Uprate Request for Appendix K Measurement Uncertainty Recapture"

Dear Sir or Madam:

Exelon Generation Company, LLC (Exelon), in Reference 1 above, requested approval of changes to the Peach Bottom Atomic Power Station, Units 2 & 3, Operating License and Technical Specifications associated with an increase in the licensed power level. To support the review of this license amendment request, a teleconference between the NRC and Exelon was held on October 8, 2002. This letter serves to document Exelon's response to the question asked during that teleconference.

Below is the NRC's question and Exelon's response:

A 001

NRC Question:

The staff SER for Caldon Topical Report ER-80P [*Reference 2 above*] included four additional requirements to be addressed by a licensee requesting a power uprate. The licensee submittal addressed one of the four requirements as follows:

1. The licensee should discuss the maintenance and calibration procedures that will be implemented with the incorporation of the LEFM. These procedures should include processes and contingencies for an inoperable LEFM and the effect on thermal power measurement and plant operation.

The licensee stated that work will be controlled by procedures developed in accordance with Caldon recommendations. The incorporation of, and adherence to, these requirements will assure that the LEFM system is properly maintained and calibrated. The licensee developed contingency plans for operation of the plant with an LEFM out-of-service, and requested an allowable outage time (AOT) of 72 hours to enact LEFM system repairs. During the 72-hour AOT, the licensee proposed that the thermal power will be maintained at 3514 MWt. In the supplement dated September 11, 2002 [*Reference 3 above*], the licensee clarified that, if the LEFM is not restored in 72 hours, reactor power will be reduced to the CLTP of 3458 MWt.

On page 4 of 11 of Attachment 1 [*Reference 1 above*], the licensee stated that calculations have been performed to support the uncertainty of different combinations of LEFM and flow nozzle inputs to the core thermal power calculation. In addition, the licensee stated, if the flow nozzles are calibrated to the last available data from the LEFM system, it will be acceptable to remain at 3514 MWt for up to 72 hours to enact LEFM system repairs. Provide the results of the calculations that justify remaining at 3514 MWt for 72 hours with the LEFM inoperable. These calculations should describe the rate of feedwater venturi decalibration in terms of the error in the calculation of reactor power at the end of the 72 hour AOT.

Exelon Response:

Exelon calculated the time-dependent effect of feedwater venturi measurement uncertainty on the plant heat balance calculation. In this calculation, it was assumed the LEFM system was inoperable for one year, and the change in feedwater venturi measurement accuracy was calculated for that period. Exelon then used the corresponding one-year value to determine the change in

Submittal of RAI Response for LAR 01-01190
October 16, 2002
Page 3

feedwater venturi measurement uncertainty for a 72 hour period. It was determined that the decrease in feedwater venturi measurement accuracy would result in a 0.0107% heat balance error, which corresponds to 0.4 MW during the 72-hour allowed out-of-service time.

There are no new commitments made in this letter.

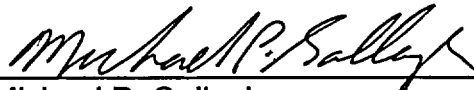
There is no impact to the No Significant Hazards Consideration submitted in the Reference 1 letter.

If you have any questions or require additional information, please contact me at (610) 765- 5664.

I declare under penalty of perjury that the foregoing is true and correct.

Respectfully,

Executed on 10-15-02



Michael P. Gallagher
Director, Licensing and Regulatory Affairs
Mid-Atlantic Regional Operating Group

cc: H. J. Miller, Administrator, Region I, USNRC
A. C. McMurtray, USNRC Senior Resident Inspector, PBAPS
J. Boska, Senior Project Manager, USNRC (via FedEx)
R. R. Janati - Commonwealth of Pennsylvania