

September 21, 2006

Mr. Christopher M. Crane
President and Chief Nuclear Officer
Exelon Nuclear
Exelon Generation Company, LLC
200 Exelon Way, KSA 3-E
Kennett Square, PA 19348

SUBJECT: STATE-OF-THE-ART REACTOR CONSEQUENCE ANALYSES
PEACH BOTTOM ATOMIC POWER STATION, UNIT NOS. 2 AND 3

Dear Mr. Crane:

The purpose of this letter is to provide you with information on a new study underway at the Nuclear Regulatory Commission (NRC), the State-of-the-Art Reactor Consequence Analyses (SOAR CA) study. The objective of the study is to perform a realistic evaluation of offsite consequences, using an improved understanding of source terms and severe accident phenomenology, and crediting the use of Severe Accident Management Guidelines and other procedures that were not in place when the 1982 siting study (NUREG/CR-2239, Technical Guidance for Siting Criteria Development) was performed.

Over the next three years, the NRC plans to: (1) evaluate and update, as appropriate, analytical methods and models for realistic evaluation of severe accident progression and offsite consequences, and (2) develop SOAR CAs for each nuclear power plant. The goal is to accurately represent offsite consequences at each plant based on current, rather than past, plant operations. To that end, the NRC seeks your assistance in acquiring plant-specific design and operation information, including enhancements, so that your plant is accurately represented. Information supplied to support the project does not need to be docketed, and the NRC staff will provide you the opportunity to review draft study reports to ensure accuracy.

The request for information will be voluntary, but your cooperation is essential to ensure accurate representation of your plant. If you have any questions, please contact me at (301) 415-1030.

Sincerely,

/RA/

Richard V. Guzman, Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

cc: See next page

Peach Bottom Atomic Power Station, Unit
Nos. 2 and 3

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