



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 28, 1994

Mr. Robert G. Byram
Senior Vice President-Nuclear
Pennsylvania Power and Light
Company
2 North Ninth Street
Allentown, PA 18101

SUBJECT: REGULATORY GUIDE 1.97 - BOILING WATER REACTOR NEUTRON FLUX
MONITORING (TAC M90891 AND M90892)

Dear Mr. Byram:

Section 6.2 of Generic Letter 82-33 requests applicants and licensees to provide a report on their implementation of Regulatory Guide (R.G.) 1.97, Revision 2, and methods for complying with the Commission's regulations including supporting technical justification of any proposed deviations or alternatives. A large number of deviation requests were received from Boiling Water Reactor (BWR) applicants and licensees concerning neutron flux monitoring instrumentation. These requests were initially denied.

In support of these requests, the BWR Owners Group submitted NEDO-31558, "Position on NRC Regulatory Guide 1.97, Revision 3, Requirements for Post-Accident Neutron Monitoring System." NEDO-31558 proposes alternate criteria for neutron flux monitoring instrumentation in lieu of the Category 1 criteria stated in R.G. 1.97.

The staff has completed its evaluation of NEDO-31558, and by letter dated January 13, 1993, to the BWR Owners Group, issued a safety evaluation (enclosed). The safety evaluation concluded that, for current BWR operating license and construction permit holders, the criteria of NEDO-31558 are acceptable. However, for new license applications for both conventional and advanced BWR designs, the R.G. 1.97 criteria must be met for neutron flux monitoring instrumentation. The staff further concluded that Category 1 neutron flux monitoring instrumentation is not needed for existing BWRs to cope with a Loss-of-Coolant Accident, Anticipated Transient Without Scram, or other accidents that do not result in severe core damage conditions. Instrumentation to monitor the progression of core melt accidents is best addressed by the current severe accident management program.

Based on information provided to the Commission, the staff has determined that the neutron flux monitoring instrumentation installed at Susquehanna Steam Electric Station Units 1 and 2 exceeds the criteria of NEDO-31558. Therefore, no action or additional response is necessary for your plants. However, be aware that you may take advantage of any relaxation that the new criteria might allow in the design of the neutron flux monitoring system.

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If you have any questions regarding this multi-plant action, please contact me at (301) 504-1402.

Sincerely,

/S/

Chester Poslusny, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-387/50-388

Enclosure: Safety Evaluation

cc w/encl: See next page

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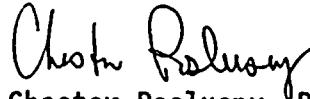
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Chester Poslusny, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
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Enclosure: Safety Evaluation

cc w/encl: See next page

Mr. Robert G. Byram
Pennsylvania Power & Light Company

Susquehanna Steam Electric Station,
Units 1 & 2

cc:

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