

Docket File



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 5, 1995

Mr. William J. Cahill, Jr.
Chief Nuclear Officer
Power Authority of the State
of New York
123 Main Street
White Plains, NY 10601

SUBJECT: SAFETY EVALUATION OF SAFE SHUTDOWN CAPABILITY REASSESSMENT FOR
JAMES A. FITZPATRICK NUCLEAR POWER PLANT (TAC NO. M84780)

Dear Mr. Cahill:

By letter dated October 26, 1992, and supplemented by letters dated July 22, 1994, and October 18, 1994, the Power Authority of the State of New York submitted the report entitled, "Safe Shutdown Capability Reassessment, 10 CFR Part 50 Appendix R, September 1992." The report details your proposed four shutdown methods (Methods 1, 2, 3, and 4) to achieve cold shutdown in the event of a fire. With the exception of Method 3, the methods satisfy the technical requirements of Appendix R. Method 3 relies on the use of low-pressure injection systems (LPISs) (automatic depressurization system (ADS)/low-pressure coolant injection or ADS/core spray) from the control room in the event of a fire in areas not requiring an alternative shutdown capability. You proposed to use LPIS as a means of achieving safe shutdown in the event of a fire in five fire areas. The use of LPIS represents a change from your previously approved methodology which only credited the use of LPISs as an alternative shutdown capability in one area.

Your proposed reliance on the use of LPISs to achieve safe shutdown conditions in the event of a fire in areas not requiring alternative shutdown does not meet the technical requirements of Section III.G.1 of Appendix R, to the extent that its use will not allow hot-shutdown conditions to be maintained. Additionally, this proposed approach does not satisfy the shutdown system performance criteria of Section III.L of Appendix R. This represents a change from your previously approved methodology which only credited the use of LPIS as an alternative shutdown capability in the event of fire in Fire Area XV (Tor). The use of LPISs in lieu of the normally preferred high-pressure systems, (i.e., high-pressure coolant injection or reactor core isolation cooling) in the event of fire in other areas has been previously evaluated and approved by the NRC staff in separate exemptions granted on a case-by-case basis. Specifically, by letters dated April 26, 1983, September 15, 1986, and September 10, 1992, the NRC granted exemptions approving the use of ADS/LPCI as an alternate shutdown capability in the event of a fire in Fire Area VII (Control Room, Relay Room and Cable Spreading Room), Fire Area ID (North Cable Tunnel) and Fire Area XVI (Battery Rooms Corridor Area).

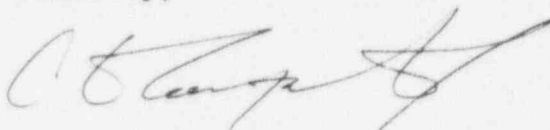
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Our contractor, Brookhaven National Laboratory (BNL) reviewed the submittal and the post-fire safe shutdown methodology and analysis of associated circuits. Enclosed is the Technical Evaluation Report (TER) from BNL. The NRC staff has reviewed the TER and agrees with the BNL conclusions. It is recommended that you seek an exemption from the requirements of Section III.L of Appendix R for the five additional areas. Alternatively, you can ensure the availability of a high pressure injection system for these areas. The details of this issue are discussed in Section 2.3.2 of the attached TER.

Sincerely,



C. E. Carpenter, Jr., Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-333

Enclosure: Technical Evaluation
Report

cc w/encl: See next page

William J. Cahill, Jr.
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James A. FitzPatrick Nuclear
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cc:

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