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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JAN 06 1981

Mr. R. C. Arnold
Chief Operating Executive
Metropolitan Edison Company
100 Interpace Parkway
Parsippany, New Jersey 07054

Dear Mr. Arnold:

Subject: Contingency Plan for Transfer and Storage of Reactor Containment Building Sump Water

This letter is in response to your letter (TLL 541) of November 4, 1980 which provided the contingency plan for the transfer and storage of the contaminated water in the reactor containment building sump. We have initiated our review of the plan and will require additional information to complete our review, including information about the potential interaction between Unit 1 and Unit 2 from implementing the plan.

Your letter identifies four storage sites and lists the sites in the following order of suitability: 1. Unit 2 reactor coolant bleed tanks (232,000 gal.); Unit 2 Tank Farm in "A" spent fuel pool (110,000 gal.); Unit 1 reactor coolant bleed tanks (247,000 gal.); and Unit 2 "A" spent fuel pool (320,000 gal.). You also state that the use of Unit 1 tankage is undesirable and will be examining the impact of utilizing the Unit 2 "A" spent fuel pool. We agree that the use of Unit 1 tankage is undesirable in that it spreads highly contaminated water and suspended solids throughout additional piping and components in both Unit 1 and Unit 2 and places burdens on the Unit 1 facility if the tankage is not completely available (i.e., the tanks are partially filled with Unit 1 contaminated water). We recommend that consideration be given to upgrade the suitability of the Unit 2 "A" spent fuel pool and to utilize the Unit 1 tankage only as a last resort. If you cannot implement actions to mitigate the impact of utilization of the Unit 2 "A" spent fuel pool, you should provide in your contingency plan information concerning the water movements (including potential discharges to the river) which may be required to make the Unit 1 bleed tanks available.

Other comments and requests for additional information are contained in the enclosure. I would be pleased to discuss this matter with you.

Sincerely,

Bernard J. Snyder
Bernard J. Snyder, Program Director
TMI Program Office
Office of Nuclear Reactor Regulation

Enclosure:
Request for Additional Information

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ENCLOSURE

NRC STAFF COMMENTS - "CONTINGENCY PLAN FOR TRANSFER
AND STORAGE OF REACTOR CONTAINMENT BUILDING SUMP WATER"

General Comments:

This contingency plan does not provide a current tank status for tanks other than the RCBTs. The plan should provide a summary of water currently in tanks that could safely be disposed of either to the environment or other on-site tanks. No information has been provided to assure that procedures exist to transfer water from the sump to tanks in Unit 1, Unit 2 or the spent fuel pool. Procedures should be in place that would assure that safe transfers can be made to any tankage in either Unit 1 or Unit 2.

Your plan does not describe which pumps and piping systems would be used to transfer sump water.

Specific Comments:

Page 1 - #2

Is there an emergency plan in place for transferring sump water? Does the emergency plan provide assurances that transfer pathways and equipment would be available in a timely manner in the event a transfer is required?

Are procedures written and approved for sump water transfer?

Does an emergency procedure exist for denoting systems, priority of action, and specific procedural steps for a coordinated (consolidated) approach?

Anticipated time constraints are not listed for all phases of transfer evolutions, i.e., time to empty receiving tank with time to fill from sump. Please provide such information.

Page 1 - #3

Identify safety related plant operations that would be affected in the event that sump water had to be transferred to tanks in Unit 2.

Page 1 - #4

In item #1 of your conclusions you state that storage locations exist within the plant to accommodate the entire quantity of sump water. We understand the word plant to mean tankage in Unit 2. If the entire inventory of sump water were transferred to Unit 2 tanks what would be the remaining capacity available for flush water and inleakage?

We are assuming that this tankage to be the RCBT and the spent fuel pool. Are procedures written and approved for the emergency transfer of sump water to the Unit 1 RCBT?

What formal constraints will be imposed on Unit 1 if water is transferred, i.e., procedure requirements?

Page 2 (middle)

For the locations identified provide the current status. In the event that transfer of sump water is required, how much time would be required to make space available? How much reserve capacity would this plan set aside in

Unit 2 to take care of in-leakage? At what point, and at what storage location inventory, will a decision be made to transfer water to Unit 1?

Page 2 - #2 (at bottom)

Identify equipment and instrumentation in storage location cubicles that would require maintenance.

Page 3 - first full paragraph

After the transfer of sump water, what is the expected volume of flush water that would be required? Where will the flush water be transferred to?

Page 3 - Item #1

In your analysis, was credit taken for additional shielding that could be placed on top of the existing shielding?

Page 3 - Item #2

To what level would airborne contamination increase as a result of storage of sump water in the Spent Fuel Pool? Identify the airborne contaminants and the possible extent of increased releases to the environment.