

ATTACHMENT I

PROPOSED TECHNICAL SPECIFICATION CHANGES
RELATED TO
SPENT FUEL STORAGE MODIFICATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
DOCKET NO. 50-333
OCTOBER 10, 1979

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b. From the time that the LPCI mode is made or found to be inoperable for any reason, continued reactor operation is permissible during the succeeding 7 days unless the LPCI mode is made operable earlier provided that during these 7 days all active components of both Core Spray Systems, the containment spray subsystem (including two RHR pumps) and the emergency diesel generators shall be operable.

c. When the reactor water temperature is greater than 212°F the motor operator for the RHR cross-tie valve shall be maintained disconnected from its power source. It shall be maintained chain-locked in the closed position. The manually operated gate valve in the cross-tie line, in series with the motor operated valve, shall be maintained locked in the closed position.

4. a. The reactor shall not be started up with the RHR System supplying cooling to the fuel pool.

b. The RHR System can supply cooling to the spent fuel only when the reactor coolant temperature is below 212°.

b. When it is determined that the LPCI mode is inoperable, both Core Spray Systems, the containment spray subsystem, and the emergency diesel generators shall be demonstrated to be operable immediately and daily thereafter.

c. The power source disconnect and chain lock to motor operated RHR cross-tie valve, and lock on manually operated gate valve shall be inspected once each operating cycle to verify that both valves are closed and locked.

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5.0 DESIGN FEATURES

5.1 SITE

- A. The James A. FitzPatrick Nuclear Power Plant is located on the PASNY portion of the Nine Mile Point site, approximately 3,000 ft. east of the Nine Mile Point Nuclear Station. The NMP-JAF site is on Lake Ontario in Oswego County, New York, approximately 7 miles northeast of Oswego. The plant is located at coordinates north 4,819,545.012 m, east 386,968.945 m, on the Universal Transverse Mercator System.
- B. The nearest point on the property line from the reactor building and any points of potential gaseous effluents, with the exception of the lake shoreline, is located at the northeast corner of the property. This distance is approximately 3,200 ft. and is the radius of the exclusion area as defined in 10 CFR 100.3.

5.2 REACTOR

- A. The reactor core consists of not more than 560 fuel assemblies. For the current cycle three fuel types are present in the core: 7 x 7, 8 x 8, and 8 x 8R. These fuel types are described in Section 3.2 of the FSAR, NEDO-20360, and NEDO-24011, respectively. The 7 x 7 fuel has 49 fuel rods, the 8 x 8 fuel has 63 fuel rods and 1 water rod, and the 8 x 8R fuel has 62 fuel rods and 2 water rods.

- B. The reactor core contains 137 cruciform-shaped control rods as described in Section 3.4 of the FSAR.

5.3 REACTOR PRESSURE VESSEL

The reactor pressure vessel is as described in Tables 4.2-1 and 4.2-2 of the FSAR. The applicable design codes are described in Section 4.2 of the FSAR.

5.4 CONTAINMENT

- A. The principal design parameters and characteristics for the primary containment are given in Table 5.2-1 of the FSAR.
- B. The secondary containment is as described in Section 5.3 and the applicable codes are as described in Section 12.4 of the FSAR.
- C. Penetrations to the primary containment and piping passing through such penetrations are designed in accordance with standards set forth in Section 5.2 of the FSAR.

5.5 FUEL STORAGE

- A. The new fuel storage facility design criteria are to maintain a K_{eff} dry < 0.90 and flooded < 0.95 . Compliance shall be verified prior to introduction of any new fuel design to this facility.

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5.5 (cont'd)

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- B. The spent fuel storage pool is designed to maintain $K_{eff} < 0.95$ under all conditions as described in the Authority's application for spent fuel storage modification transmitted to NRC July 26, 1978. In order to assure that the criteria is met, new fuel average enrichment will be limited to ≤ 3.3 w/o U-235.

5.6 SEISMIC DESIGN

The reactor building and all engineered safeguards are designed on basis of dynamic analysis using acceleration response spectrum curves which are normalized to a ground motion of 0.08 g. for the Operating Basis Earthquake, and 0.15 g, for the Design Basis Earthquake.

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ATTACHMENT II

SUPPORTING INFORMATION
FOR PROPOSED TECHNICAL
SPECIFICATION CHANGES
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Supporting Information for Proposed Technical Specification
Changes Related to Spent Fuel Storage Modifications

I. Requested Change and Bases

A. Section 3.5.A

This change is made to provide added assurance that use of the RHR System for spent fuel cooling will not affect the LPCI mode of operation.

B. Section 5.5

This change is made to reflect reactivity conditions in the new fuel storage area and the spent fuel pool as modified and to provide the basis for establishing compliance.

II. Safety Evaluation

The changes proposed to Technical Specification Sections 3.5.A and 5.5 do not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety .

The margin of safety for reactivity in the spent fuel storage pool has not been significantly reduced.

III. References

1. JAFNPP FSAR
2. Letter of July 26, 1978 from P. J. Early (Power Authority) to T. A. Ippolito (NRC)