

ATTACHMENT I to JPN-93-004

PROPOSED TECHNICAL SPECIFICATION CHANGES
DELETING A REFERENCE TO NOMINAL MCPR

(JPTS-92-006)

New York Power Authority

JAMES A. FITZPATRICK NUCLEAR POWER PLANT
Docket No. 50-333
DPR-59

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3.1 BASES (cont'd)

Turbine control valves fast closure initiates a scram based on pressure switches sensing electro-hydraulic control (EHC) system oil pressure. The switches are located between fast closure solenoids and the disc dump valves, and are set relative ($500 < P < 850$ psig) to the normal (EHC) oil pressure of 1,600 psig so that based on the small system volume, they can rapidly detect valve closure or loss of hydraulic pressure.

The requirement that the IRM's be inserted in the core when the APRM's read 2.5 indicated on the scale in the start-up and refuel modes assures that there is proper overlap in the neutron monitoring system functions and thus, that adequate coverage is provided for all ranges of reactor operation.

- B. The limiting transient which determines the required steady state MCPR limit depends on cycle exposure. The operating limit MCPR values as determined from the transient analysis in the current reload submittal for various core exposures are specified in the Core Operating Limits Report (COLR).

The ECCS performance analyses assumed reactor operation will be limited to the MCPR value for each fuel type as described in NEDO-21662 (Reference 1) and NEDC-31317P (Reference 2) including the latest revision, errata and addenda. The Technical Specifications limit operation of the reactor to the more conservative MCPR based on consideration of the limiting transient as specified in the COLR.

C. References

1. General Electric Topical Report NEDO-21662, Revision 2, "Loss-of-Coolant Accident Analysis Report for James A. FitzPatrick Nuclear Power Plant (Lead Plant)," July 1977 with errata and addenda.
2. General Electric Topical Report NEDC-31317P, "James A. FitzPatrick Nuclear Power Plant SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis," October 1986 with revisions, errata and addenda.

**SAFETY EVALUATION FOR
PROPOSED TECHNICAL SPECIFICATION CHANGES
DELETING A REFERENCE TO NOMINAL MCPR (JPTS-92-006)**

I. DESCRIPTION OF THE PROPOSED CHANGES

The proposed change to the James A. FitzPatrick Technical Specifications revises Bases 3.1.B and adds Bases 3.1.C. The proposed changes are discussed below.

Minor changes in format, such as type font, margins or hyphenation, are not described in this submittal. These changes are typographical in nature and do not affect the content of the Technical Specification.

Page 35, Bases 3.1

In the second paragraph of Bases 3.1.B, replace the phrase "MCPR = 1.20, as described in NEDO-21662 and NEDC-31317P" with the phrase "the MCPR value for each fuel type as described in NEDO-21662 (Reference 1) and NEDC-31317P (Reference 2) including the latest revision, errata and addenda."

Add a new Bases Section 3.1.C that reads as follows:

"C. References

1. General Electric Topical Report NEDO-21662, Revision 2, "Loss-of-Coolant Accident Analysis Report for James A. FitzPatrick Nuclear Power Plant (Lead Plant)," July 1977 with errata and addenda.
2. General Electric Topical Report NEDC-31317P, "James A. FitzPatrick Nuclear Power Plant SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis," October 1986 with revisions, errata and addenda."

II. PURPOSE OF THE PROPOSED CHANGES

This application for an amendment to the James A. FitzPatrick Technical Specifications proposes to replace a specific initial loss-of-coolant accident (LOCA) Minimum Critical Power Ratio (MCPR) in Bases Section 3.1.B with a reference to the initial LOCA MCPR used in NRC approved LOCA analyses (References 1 and 2) and add a Bases Section 3.1.C with the references.

Bases Section 3.1.B currently identifies the initial LOCA MCPR used in LOCA analyses as "1.20." The initial LOCA MCPR is an initial condition assumed in the LOCA analyses. The latest revision to NEDC-31317P (Reference 3) assumes a higher MCPR for GE-11 fuel requiring replacement of the "1.20" to incorporate this assumption as well as preclude the necessity for future amendments. This change is consistent with NRC Generic Letter 88-16 (Reference 4) which permitted cycle-specific parameters to be moved from the Technical Specifications to the Core Operating Limits Report (COLR) (Reference 5). Reference 6 documents that the LOCA (MAPLHGR) thermal

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limits of GE-11 fuel in the current Cycle 11 core are applicable with an assumed initial LOCA MCPR of 1.20.

The FitzPatrick Technical Specifications were previously amended to address Generic Letter 88-16 (References 7 and 8). Amendment 162 identified the operating limit and power and flow dependent MCPR limits as cycle-specific parameters, deleted them from the Technical Specifications and transferred them to the COLR. The specific initial LOCA MCPR limit was not removed at the time because it historically has not changed from cycle to cycle and the intent of the Generic Letter was to allow removal of those parameters from the Technical Specifications which "generally change with each reload core." When the initial LOCA MCPR limit was raised slightly for GE-11 fuel, it became appropriate to delete the initial LOCA MCPR limit from the Technical Specifications and reference the LOCA analyses.

III. SAFETY IMPLICATIONS OF THE PROPOSED CHANGES

There are no safety implications associated with the replacement of the limit on the initial LOCA MCPR value assumed for LOCA analysis or with reference to the Reports on LOCA analyses with their revisions, errata and addenda. The proposed change is consistent with the guidance of Generic Letter 88-16.

Generic Letter 88-16 allowed the removal of cycle specific parameters from the Technical Specifications when three requirements were met:

- The addition of a formal report that includes the values of cycle-specific parameter limits that have been established using an NRC approved methodology and consistent with all applicable limits of the safety analysis;
- The addition of an administrative reporting requirement to submit the formal report to the NRC for information; and,
- The modification of individual Technical Specifications to note that cycle-specific parameters shall be maintained within the limits provided in the COLR.

The intent of these criteria have been met. Technical Specification 6.9.A.4 requires core operating limits to be established using approved methodology (References 1, 2 and 9) and to be documented and submitted as a formal report, the COLR. The initial LOCA MCPR limit is a parameter assumed for the LOCA analyses. Although the initial LOCA MCPR is not reported in the COLR, it is one of the limits used for establishing the operating limit MCPR. Therefore, any changes to the initial LOCA MCPR are reflected in the COLR since the operating MCPR must bound the initial LOCA MCPR as well as any MCPR values assumed for analysis of anticipated operational transients (AOT). Both the safety limit MCPR and the operating limit MCPR must be recalculated or reconfirmed for each cycle using NRC approved methodology (Reference 9).

IV. EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION

Operation of the FitzPatrick plant in accordance with the proposed Amendment would not involve a significant hazards consideration as defined in 10 CFR 50.92, since it

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would not:

1. involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change deletes the specific initial LOCA MCPR parameter used as an assumption for LOCA analyses from the Bases and replaces it with a reference to the applicable LOCA analyses. The operating limit MCPR is established to bound the initial LOCA MCPR and the MCPR assumed for analysis of anticipated operational transients (AOT). The establishment of the operating limit MCPR limit in accordance with NRC approved methodology and the incorporation of this limit into the Core Operating Limits Report ensures operation within established plant safety limits. The removal of this parameter from the Technical Specifications will have no effect on the probability or consequences of an accident.

2. create the possibility of a new or different kind of accident from any accident previously evaluated.

No safety related equipment, function or plant operation will be altered as a result of the proposed change. The change deletes the specific initial LOCA MCPR value replacing it with a reference to the plant LOCA analyses. The selection of the operating limit MCPR as the most limiting value bounding LOCA and AOT analyses will remain unchanged. These analyses are performed using NRC approved methodology.

3. involve a significant reduction in a margin of safety.

The proposed change has no effect on the margin of safety. The approved LOCA methods including the manner in which the initial LOCA MCPR is used have not changed. The only change is that the parameter is no longer listed in the Technical Specifications. The core operating limit MCPR will continue to bound the initial LOCA MCPR and is controlled and documented by quality assurance programs and administrative controls in the Technical Specifications.

V. IMPLEMENTATION OF THE PROPOSED CHANGES

Implementation of the proposed changes will not adversely affect the ALARA or Fire Protection Programs at the FitzPatrick plant, nor will the changes affect the environment. The changes to the Bases reflect current practice and these changes have no effect on tests that result in discharges, procedures for control of personnel exposure, the source terms that could result in personnel exposure, or any aspect of the fire protection program.

VI. CONCLUSION

The changes, as proposed, do not constitute an unreviewed safety question as defined in 10 CFR 50.59. That is, they:

1. will not change the probability nor the consequences of an accident or malfunction

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of equipment important to safety as previously evaluated in the Safety Analysis Report;

2. will not increase the possibility of an accident or malfunction of a type different from any previously evaluated in the Safety Analysis Report; and
3. will not reduce the margin of safety as defined in the basis for any technical specification.

The changes involve no significant hazards consideration, as defined in 10 CFR 50.92.

VII. REFERENCES

References relied upon to prepare the Technical Specification change request:

1. General Electric Report NEDO-21662, Revision 2, "Loss-of-Coolant Accident Analysis Report for James A. FitzPatrick Nuclear Power Plant (Lead Plant)," July 1977 with errata and addenda.
2. General Electric Report NEDC-31317P, "James A. FitzPatrick Nuclear Power Plant SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis," October 1986, with revisions, errata and addenda.
3. General Electric Report NEDC-31317P, Revision 1, "James A. FitzPatrick Nuclear Power Plant SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis," November 1991.
4. NRC Letter, D. M. Crutchfield to all power reactor licensees, dated October 4, 1988, regarding removal of Cycle-Specific Parameter Limits from Technical Specifications (Generic Letter 88-16).
5. Core Operating Limits Report submitted by NYPA letter to NRC prior to startup following refueling.
6. General Electric Report 23A7114, Revision 0, "Supplemental Reload Licensing Report for James A. FitzPatrick Nuclear Power Plant Reload 10 Cycle 11," June 1992.
7. NYPA letter, J. C. Brons to NRC (JPN-90-006), dated January 12, 1990, regarding a Technical Specification change to remove cycle-specific parameters.
8. NRC letter, D. E. LaBarge to NYPA, dated May 31, 1990 regarding Amendment 162 to the Technical Specifications.
9. General Electric Report NEDE-24011-P-A-10, "General Electric Standard Application for Reactor Fuel (GESTAR II)," February 1991.

Background documents not specifically referenced:

1. James A. FitzPatrick Nuclear Power Plant Updated Final Safety Analysis Report.

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2. James A. FitzPatrick Nuclear Power Plant Safety Evaluation Report (SER), dated November 20, 1972, and Supplements.
3. NRC Letter, A. C. Thadani to GE, J. S. Charnley, dated July 23, 1990, regarding acceptance of Amendment 22 to General Electric Licensing Topical Report NEDE-24011-P-A.

ATTACHMENT III to JPN-93-004

PROPOSED TECHNICAL SPECIFICATION CHANGES
DELETING A REFERENCE TO NOMINAL MCPR
MARKUP OF TECHNICAL SPECIFICATION PAGES

(JPTS-92-006)

New York Power Authority

JAMES A. FITZPATRICK NUCLEAR POWER PLANT
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3.1 BASES (cont'd)

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the MCPR value for each fuel type as described in NEDO-21662 (Reference 1) and NEDC-31317P (Reference 2) including the latest revision, errata and addenda

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2. General Electric Topical Report NEDC-31317P, "James A. FitzPatrick Nuclear Power Plant SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis," October 1986 with revisions, errata and addenda.