

Entergy Nuclear Northeast Entergy Nuclear Operations, Inc. James A. FitzPatrick NPP P.O. Box 110 Lycoming, NY 13093 Tel 315 349 6024 Fax 315 349 6480

T. A. Sullivan Vice President, Operations—JAF

September 28, 2001 JAFP-01-0228

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Mail Station O-P1-17 Washington, DC 20555-0001

SUBJECT:

James A. FitzPatrick Nuclear Power Plant

Docket No. 50-333

Proposed Change to the Technical Specifications

Regarding ATWS Recirculation Pump Trip Instrumentation

Requirements (JPTS-01-002)

Dear Sir:

This application for an amendment to the James A. FitzPatrick Technical Specifications proposes a revised, single ATWS Recirculation Pump Trip Reactor Pressure High setpoint to replace the current conditional setpoints which are based upon the number of Safety Relief Valves out of service.

The signed original of the Application for Amendment to the Operating License is enclosed for filing. Attachment I contains the proposed new Technical Specification pages, and Attachment II is the Safety Evaluation for the proposed changes. A markup of the affected Technical Specification pages is included as Attachment III.

There are no commitments contained in this submittal.

ly for T. Sullivan

A copy of this application and the associated attachments are being provided to the designated New York State official in accordance with 10 CFR 50.91.

If you have any questions, please contact Mr. Andrew Halliday at 315-349-6055.

Very truly yours,

T. A. Sullivan

att: As stated cc: next page

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Regional Administrator U. S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

Office of the Resident Inspector U. S. Nuclear Regulatory Commission P.O. Box 136 Lycoming, NY 13093

Mr. G. Vissing, Project Manager Project Directorate I Division of Licensing Project Management U. S. Nuclear Regulatory Commission Mail Stop OWFN 8C2 Washington, DC 20555

Mr. F. William Valentino, President New York State Energy Research and Development Authority Corporate Plaza West 296 Washington Avenue Extension Albany, NY 12203-6399

BEFORE THE UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of)	
Entergy Nuclear Operations, Inc.)	Docket No. 50-333
James A. FitzPatrick Nuclear Power Plant)	

APPLICATION FOR AMENDMENT TO OPERATING LICENSE

Entergy Nuclear Operations, Inc. requests an amendment to the Technical Specifications (TS) contained in Appendix A to Facility Operating License DPR-59 for the James A. FitzPatrick Nuclear Power Plant. This application is filed in accordance with Section 10 CFR 50.90 of the Nuclear Regulatory Commission's regulations.

This application for an amendment to the James A. FitzPatrick Technical Specifications proposes a single revised ATWS Recirculation Pump Trip Reactor Pressure High setpoint.

The signed original of the Application for Amendment to the Operating License is enclosed for

filing. Attachment I contains the proposed new TS pages and Attachment II is the Safety Evaluation for the proposed changes. A markup of the affected TS pages is included as Attachment III.

Entergy Nuclear Operations, Inc.

this <u>28 inday of Sept.</u> 2001. for T. Sullivar Remis S. Botton.

STATE OF NEW YORK COUNTY OF OSWEGO

Subscribed and sworn to before me

T. A. Sullivan

Vice President, Operations-JAF

Notary Public

BONNIE S. BOSTIAN # 4857051 Notary Public, State of Naw York Oswepo County 2 0 4 2 My Commission Expires June 30, 1

REVISED TECHNICAL SPECIFICATION PAGES

PROPOSED TECHNICAL SPECIFICATION CHANGES REGARDING ATWS RECIRCULATION PUMP TRIP INSTRUMENTATION REQUIREMENTS

(JPTS-01-002)

Entergy Nuclear Operations, Inc.

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Docket No. 50-333

DPR-59

TABLE 3.2-7

ATWS RECIRCULATION PUMP TRIP INSTRUMENTATION REQUIREMENTS

Minimum Number of Operable Instrument Channels Per Trip System (Notes 1 & 2)	Trip Function	Trip Level Setting	Applicable Modes	
2	Reactor Pressure - High	≤ 1155 psig	Run	
2	Reactor Water Level - Low Low	≥ 105.4 in. above TAF	Run	

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Amendment No. 237

SAFETY EVALUATION

PROPOSED TECHNICAL SPECIFICATION CHANGES REGARDING ATWS RECIRCULATION PUMP TRIP INSTRUMENTATION REQUIREMENTS

(JPTS-01-002)

Entergy Nuclear Operations, Inc.

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Docket No. 50-333

DPR-59

SAFETY EVALUATION Page 1 of 3

I. DESCRIPTION OF THE PROPOSED CHANGES

The following proposed changes to the James A. FitzPatrick Nuclear Power Plant (JAFNPP) Technical Specifications establish a revised, single ATWS Recirculation Pump Trip Reactor Pressure High setpoint.

Page 76a

Change Trip Level Setting for Reactor Pressure-High to a single value of \leq 1155 psig in Table 3.2-7. Delete the Table reference to Note 3.

Page 76c

Replace text on page 76c with "THIS PAGE INTENTIONALLY BLANK."

II. PURPOSE OF THE PROPOSED CHANGES

The proposed changes revise the Technical Specifications to reflect the results of the most recent ATWS Overpressurization Analysis for FitzPatrick (Reference 1). This analysis, performed to assure that plant operation under Extended Load Line Limit Analysis (ELLLA) conditions meets ATWS acceptance criteria, demonstrates satisfactory ATWS overpressure mitigation with an ATWS Reactor Pressure-High Trip Level Setting of < 1155 psig and 2 or fewer SRVs out of service. The proposed change establishes a single trip level setting. The current, reduced trip level with a higher number of SRVs out of service is eliminated, since operation with more than 2 SRVs out of service is prohibited by Technical Specifications.

Previous analyses, which form the basis of the current Technical Specification setpoint values, demonstrated satisfactory ATWS overpressure mitigation at a trip level setting of \leq 1155 psig with 1 or fewer SRVs out of service (Reference 2), and at a setting of \leq 1120 psig with 2 SRVs out of service (Reference 3).

III. SAFETY IMPLICATIONS OF THE PROPOSED CHANGES

The proposed changes remove the ATWS Reactor Pressure High Recirculation Pump (RWR) Trip setpoint dependency on the number of SRVs out of service that was introduced by Amendment 237 to the Technical Specifications. Reference 1 analyses, performed using the General Electric proprietary ODYN code (approved by the NRC for application to ATWS calculations), evaluated the most limiting plant transients at the most limiting conditions under ELLLA. The most limiting transient under these conditions is the Pressure Regulator Failure Open to maximum steam demand (PRFO). The peak RPV pressure resulting from an ATWS with PRFO is dependent on the power produced during the transient (which is sensitive to the RWR pump trip setpoint) and the capability to remove heat from the RPV (which is sensitive to the number of SRVs out of service). The Reference 1 analysis for ATWS RWR pump trip setpoint assumed 2 SRVs were out of service, the maximum number of SRVs out of service permitted during power operation by Technical Specifications.

SAFETY EVALUATION Page 2 of 3

Reference 1 reports results of analysis which demonstrates that for a high RPV pressure setpoint of \leq 1155 psig with two or fewer SRVs out of service, the peak RPV pressure for the worst case PRFO ATWS is 1401 psig. The allowable RPV pressure for this event is 1500 psig. Therefor,e adequate margin exists with the revised setpoint.

IV. EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION

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

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

A change in the ATWS high RPV pressure RWR pump trip setpoint does not affect initiation of any accident. Operation in accordance with the revised setpoint ensures the consequences of previously analyzed accidents are not changed.

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

RPV pressure following an ATWS with PRFO event (worst case transient for RPV pressurization) remains within acceptable limits with the revised setpoint. Therefore, changing the setpoint will not lead to a new or different kind of accident.

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

The analyses performed to determine the revised ATWS high pressure RWR pump trip setpoint assure maintenance of the same margin of safety as presently exists for limiting RPV pressure following an ATWS with PRFO (limiting transient). The current analyses actually show an improved margin over the results of the previous analyses (References 2 and 3), which were performed using an earlier computer code.

V. IMPLEMENTATION OF THE PROPOSED CHANGES

Implementation of the proposed changes will not adversely affect the ALARA or Fire Protection Program at the FitzPatrick plant, nor will the changes impact the environment.

VI. CONCLUSION

Based on the discussions above, implementation of a single ATWS high pressure RWR pump trip setpoint of \leq 1155 psig does not involve a significant hazards consideration or an unreviewed safety question, and will not endanger the health and safety of the public. It is further not necessary to specify a reduced ATWS high pressure RWR pump trip setpoint for more than two SRVs out of service, since operation under these conditions is prohibited by Technical Specifications.

SAFETY EVALUATION Page 3 of 3

The Plant Operating Review Committee and Safety Review Committee have reviewed this proposed Technical Specification change and agree with this conclusion.

VII. REFERENCES

- (1) "ATWS Overpressure Analysis for FitzPatrick," GE-NE-A42-00137-2-01, March, 2000.
- "James A. FitzPatrick Nuclear Power Plant Anticipated Transient Without Scram (ATWS) Analysis for Recirculation Pump Trip Setpoint Changes," NEDC-32616P, July 18, 1996.
- (3) "FitzPatrick Power Uprate Impact Study, Engineering Report: Section 9.3.1, Anticipated Transient Without Scram Analyses for the James A. FitzPatrick Nuclear Power Plant," GE-NE-187-59-1191, November 1991.

MARKED-UP TECHNICAL SPECIFICATION PAGES

PROPOSED TECHNICAL SPECIFICATION CHANGES REGARDING ATWS RECIRCULATION PUMP TRIP INSTRUMENTATION REQUIREMENTS

(JPTS-01-002)

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JAMES A. FITZPATRICK NUCLEAR POWER PLANT

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TABLE 3.2-7 (cont'd)

ATWS RECIRCULATION PUMP TRIP INSTRUMENTATION REQUIREMENTS

NOTES FOR TABLE 3.2-7 (cont.)

3. The ATWS Reactor Pressure High Recirculation Pump Trip setpoint shall be ≤ 1155 psig when either zero or one SRVs are out of service. The setpoint shall be ≤ 1120 psig when two or more SRVs are out of service.

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TABLE 3.2-7

ATWS RECIRCULATION PUMP TRIP INSTRUMENTATION REQUIREMENTS

Minimum Number of Operable Instrument Channels Per Trip System (Notes 1 & 2)	Trip Function	Trip Level Setting	Applicable Modes	
2	Reactor Pressure - High	≤ 1120 psig, or ≤ 1155 psig (Note 3)	Run	
2	Reactor Water Level - Low Low	≥ 105.4 in. above TAF	Run	٠