ATTACHMENT I to JPN-84-65

PROPOSED TECHNICAL SPECIFICATION CHANGES

RELATED TO

INSTRUMENTATION THAT INITIATES

RECIRCULATION PUMP TRIP

(PTS-84-17)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT DOCKET NO. 50-333

JAFNPP

TABLE 3.2-7

INSTRUMENTATION THAT INITIATES RECIRCULATION PUMP TRIP

Minimum Number of Operable Instrument Channels per trip System (1)	Instrument	Trip Level Setting	Total Number of Instrument Channels Provided by Design for Both Channels	Action
1	Reactor High Pressure	≤1120 psig	4	(2)
1	Reactor Low-Low Water Level	>-38 in. indicated level (≥126.5 in. above the top of active fuel)	4	(2)

Notes for Table 3.2-7

- 1. Whenever the reactor is in the run mode, there shall be one operable trip system for each parameter for each operating recirculation pump. From and after the time it is found that this cannot be met, the indicated action shall be taken.
- Reduce power and place the Mode Selector Switch in a Mode other than the Run Mode within 24 hours.

ATTACHMENT II to JPN-84-65

SAFETY EVALUATION

RELATED TO

INSTRUMENTATION THAT INITIATES

RECIRCULATION PUMP TRIP

(PTS-84-17)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT DOCKET NO. 50-333

Section I - Description of the Change

The change proposed revises Table 3.2-7 ("Instrumentation That Initiates Recirculation Pump Trip") on Page 77 of Appendix A to the FitzPatrick Operating License. The trip level setting associated with the reactor high pressure instrument is changed from " > 1120 psig" to " < 1120 psig".

Section II - Purpose of the Change

The purpose of this change is to correct an error on Table 3.2-7 that was apparently introduced in the initial issuance of the Technical Specification (Appendix A).

In NEDO-10349 (Reference a), the General Electric Company Analyzed the potential consequences of an anticipated transient without scram (ATWS) event. This report specifically addresses the shutdown effects inherently associated with a reduction in reactor coolant flow (recirculation pump trip). NEDO-10349 analyzed the most severe transients at various ATWS conditions with "...the additional function of automatically tripping (shutting off) the recirculation pumps whenever there was a conincidential occurance of: a. Neutron Flux Trip Level and, b. Vessel Pressure 1150 psig." This report concluded that the recirculation pump trip function is "quite effective in keeping reactor power, pressures and temperatures well below appropriate safety limits."

Section 3.2.G ("Recirculation Pump Trip") on Page 54 and the associated bases on Page 60 both state that the purpose of this recirculation pump trip is to limit the potential consequences of a failure to scram during an anticipated transient (ATWS).

As the existing Technical Specifications are written, this table requires that the instruments used to detect high reactor pressure for the purpose of initiating a recirculation pump trip have a setpoint greater than or equal to 1120 psig. This incorrectly establishes a lower limit for this setpoint. The intent of the recirculation pump trip is to provide a means of reducing reactor power in the event of a failure-to-scram. This table should correctly establish an upper reactor pressure limit; exceeding this setpoint will trip the recirculation pumps thereby reducing reactor power and consequently, reactor pressure.

This error was discovered in August, 1984 during routine review of plant modification documents. Before the error was discovered, a setpoint of 1135 psig was used; soon after the error was discovered, the setpoint was readjusted to approximately 1112 psig.

No significant safety hazard existed prior to the discovery and subsequent correction of this setpoint because plant procedures assure that at no time was the 1150 psig value used in NEDO-10349 exceeded, while setting the high reactor pressure recirculation pump trip setpoint.

It appears that this error was introduced during the preparation of the original issuance of the FitzPatrick Technical Specifications because no amendments have been issued by the NRC for Page 77. Calibration procedures for this setpoint were prepared from the approved Technical Specifications; this resulted in the establishment of the incorrect setpoint.

The Authority discussed this error with the FitzPatrick NRC Project Manager on August 1, 1984. During these telephone conversations, we were informed that the NRC staff agreed that Table 3.2-7 was incorrect and that " \geq 1120 psig" should be changed to read " \leq 1120 psig".

Section III - Impact of the Changes

The proposed changes to the Technical Specifications do not change any system or subsystem and will not alter the conclusions of either the FSAR or SER accident analysis. The Authority considers that this proposed amendment can be classified as not likely to involve significant hazards considerations since the change constitutes a correction to the Technical Specifications. This is clearly in keeping with example (i) included in Federal Register, Vol. 48 No. 67 dated April 6, 1983 Page 14870, (examples of amendments that are considered not likely to involve significant hazards consideration which states: "(i) A purely administrative change to technical specifications: for example, ... correction of an error, ...")

Section IV - Implementation of the Changes

The proposed changes will not impact the Fire Protection Program at the JAF plant nor will the changes impact the environment.

Section V - Conclusion

The incorporation of these changes: a) will not change the probability nor the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the Safety Analysis Report; b) will not increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report; c) will not reduce the margin of safety as defined in the Bases for any Technical Specification; d) does not constitute an unreviewed safety question; and, 3) involves no signification hazards considerations, as defined in 10 CFR 50.92.

Section VI - References

- a. General Electric Licensing Topical Report "Analysis of Anticipated Transients without SCRAM", NEDO-10349 dated March 1971.
- b. James A. FitzPatrick Nuclear Power Plant Updated Final Safety Analysis Report (FSAR), Revision 2 dated July 1984.
- c. James A. Fitzpatrick Nuclear Power Plant Safety Evaluation dated March 3, 1970, AEC Division of Reactor Licensing.