ATTACHEMENT I

PROPOSED TECHNICAL SPECIFICATION CHANGE

RELATED TO

HIGH PRESSURE WATER FIRE PROTECTION SYSTEM

SURVEILLANCE REQUIREMENTS

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
DOCKET NO. 50-333
DPR-59

LIMITING CONDITIONS FOR OPERATION

3.12 FIRE PROTECTION SYSTEMS

Applicability:

Applies to the Operational Status of the Fire Protection Systems.

Objective:

To assure operability of the Fire Protection Systems.

Specification:

A. High Pressure Water Fire Protection System

1. a. Both high pressure water fire protection pumps and associated automatic and manual initiation logic shall be operable and aligned to the high pressure water fire header.

b. The high pressure water fire protection system shall be operable with an operable flow path capable of taking suction from the lake and transferring the water through distribution piping with operable sectionalizing control or isolation valves to the yard hydrant curb valves and the first valve ahead of the water flow alarm device on each sprinkler, hose standpipe or spray system riser required to be operable per specifications 3.12.B and 3.12.D.

SURVEILLANCE REQUIREMENTS

4.12 FIRE PROTECTION SYSTEMS

Applicability:

Applies to the Surveillance of the Fire Protection System.

Objective:

To verify the operability of the Fire Protection Systems.

Specification:

A. High Pressure Water Fire Protection System

1. High pressure water fire protection system testing:

| Item | | Frequency |
|---|---|---|
| a. | High pressure water fire protection system pressure check. | Once/week |
| b. | Each pump, on a STAGGERED TEST BASIS, by starting and operating it for at least 20 minutes on recirculating flow | Once/week |
| c. | Valve operational test | Once/12 months |
| d. | System flush | Once/6 months |
| e. | Functional test including: | Once/18 months |

A. High Pressure Water Fire Protection System (Cont'd)

c. With one pump and/or associated automatic and manual initiation logic inoperable, restore the inoperable equipment to operable status within 7 days or, in lieu of any other report required by Specification 6.9.1.A, submit a Special Report to the Commission, within the next 30 days outlining the plans and procedures to be used to provide for the loss of redundancy in this system.

d. With the high pressure water fire protection system otherwise inoperable:

1. Establish a backup fire suppression water system within 24 hours, and

2. Submit a Special Report:

a) By telephone within 24 hours,

b) Confirmed by telegraph, mailgram or facsimile transmission no later than the first working day following the event, and

c) In writing within 14 days following the event, outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to operable status.

A. High Pressure Water Fire Protection System (Cont'd)

| Item | Frequency |
|---|---|
| 1. Simulated automatic actuation of each pump, | |
| 2. verifying that each automatic valve in the flow path actuates to its correct position, | |
| 3. verifying that each pump develop at least 2500 gpm at a pressure of 125 psig, and | |
| 4. verifying that each pump starts (at 95 psig for the electric pump and 85 psig for the diesel driven pump) to maintain the fire suppression water system pressure. | |
| e. System flow test in accordance with Section 11, Chapter 5 of the Fire Protection Handbook, 14th Edition, published by the National Fire Protection Association | Once/3 years |
| g. Each valve in the flow path by verifying it is in its correct position. | Once/Month |

ATTACHEMENT II

SAFETY EVALUATION

RELATED TO

HIGH PRESSURE WATER FIRE PROTECTION

SYSTEM SURVEILLANCE REQUIREMENTS

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
DOCKET NO. 50-333
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Section I - Description of Modification

In Section 4.12.A.1.e on page 244a, the word "system" is deleted.

Section 4.12.A.1.e.1 on page 244b, is reworded to eliminate a reference to an "operating sequence." In its place, "actuation of each pump" is substituted.

The word "sequentially" has been deleted from Section 4.12.A.1.e.4 on page 244b.

Section II - Purpose of the Modification

The word "system" on page 244a (Section 4.12.A.1.e) was deleted because the term "System Functional Test" is undefined by the Technical Specifications, while "functional test" is defined in Section 1.0.F.1.

Section 4.12.A.1.e.1 (page 244b) is reworded to eliminate a reference to an "operating sequence" since no such sequence exists. The pump control circuit is a simple one using a pressure switch for automatic start, and local or remote switches for manual initiation. No automatic valves (excluding pump discharge check and relief valves) are in either the fire pump suction or discharge lines.

The phrase "...each pump starts sequentially..."in Section 4.12.A.1.e.4 (page 244b) has been interpreted to mean a single, unbroken decrease in fire protection system pressure from normal to 85 psig with the observed start of the electric pump at 95 psig and the diesel at 85 psig. The Authority believes that such a test is neither necessary nor desirable when the design of the fire protection system is considered. This test requires that both pumps operate simultaneously, which would result in both pumps operating at or above rated conditions. The resulting flow exceeds the range of existing flow instrument. Any additional demand, due to either automatic or inadvertent manual initiation of any sprinkler, spray or hose would further load the pumps beyond their design condition.

Sequential testing of the fire pumps does not demonstrate any component operable or system attribute not demonstrated by nonsequential testing. Independent tests of both pumps satisfy the requirement for "...simulated automatic actuation..."required by Section 4.12.A.1.e.1.

Further, NUREG-0123 Revision 3 ("Standard technical Specifications for General Electric BWRs") indicates that the term "sequential" is optional and dependent upon plant design.

This change will further resolve NRC Inspection and Enforcement Unresolved Item No. 81-15-02.

Section IV - Implementation of the Modification

The changes, as proposed, will not impact the ALARA or Fire Protection programs at FitzPatrick. Surveillance tests will be conducted at the same frequency as previously required, thereby assuring the same reliability and availability of the High PRessure Water Fire Protection System.

Section V - Conclusion

The incorporation of these modifications: a) will not increase 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 fcr an accident or malfunction of a different type than any evaluated previosly in the safety analysis report; c) will not reduce the margin of safety as defined in the basis for an technical specification; and d) does not consitute an unreviewed safety question.

Section VI - References

(a) JAF FSAR

(b) JAF SER