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3.11 (cont'd)

D. Emergency Service Water System

1. To ensure adequate equipment and area cooling, both ESW systems shall be operable when the requirements of specification 3.5.A and 3.5.B must be satisfied, except as specified below in specification 3.11.D.2.

4.11 (Cont'd)

D. Emergency Service Water System

1. Surveillance of the ESW system shall be performed as follows:

	<u>Item</u>	<u>Frequency</u>
a.	Simulated Automatic Actuation Test	Once every 24 months
b.	Flow Rate Test - Each ESW pump shall deliver at least 1500 gpm to its respective loop. The pump total developed head shall be greater than or equal to the corresponding point on the pump curve, reduced by a maximum of 7%, for the measured flow.	Once/3 months
c.	Pump Operability	Once/month
d.	Motor Operated Valves	Once/month

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3.11 (cont'd)

2. From and after the time that one Emergency Service Water System is made or found to be inoperable for any reason continued reactor operation is permissible for a period not to exceed 7 days, provided that:
 - the operable Emergency Diesel Generator System is demonstrated to be operable immediately and daily thereafter; and,
 - all Emergency Diesel Generator System emergency loads are verified operable immediately and daily thereafter.
3. If specification 3.11.D.2 cannot be met the reactor shall be placed in the cold condition within 24 hours.

4.11 (cont'd)

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|----|------------------------------------|----------------------|
| e. | ESW instrumentation check | Once/day |
| | ESW instrument channel calibration | Once/3 months |
| f. | Logic System Functional Test | Once every 24 months |
2. ESW will not be supplied to RBCLC system during testing.
 3. Not Used

ATTACHMENT II to JPN-95-025

**Safety Evaluation
For Proposed Changes to Technical Specification
Emergency Service Water System Surveillance Test Intervals to
Accommodate 24-Month Operating Cycles (JPTS-95-001F)**

New York Power Authority

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

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Emergency Service Water System
SAFETY EVALUATION
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I. DESCRIPTION OF THE PROPOSED CHANGES

1. Page 240, Specification 4.11.D.1.a, change "Each operating cycle" to "Once every 24 months." The revised specification reads:

a.	Simulated Automatic Actuation Test	Once every 24 months
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2. Page 241, Specification 4.11.D.1.e, revise format of this specification as follows:

e.	ESW instrumentation check	Once/day
	ESW instrument channel calibration	Once/3 months

3. Page 241, Specification 4.11.D.1.f, change "Once/each operating cycle" to "Once every 24 months." The revised specification reads:

f.	Logic System Functional Test	Once every 24 months
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II. PURPOSE OF THE PROPOSED CHANGES

This application for amendment proposes to extend the Emergency Service Water System (ESW) surveillance test intervals to accommodate a 24 month operating cycle. The proposed change in test frequency is every 24 months. These changes are necessary to avoid an extended mid-cycle outage. These changes follow the guidance provided by Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate 24-Month Fuel Cycle," (Reference 1). Extension of the surveillance test intervals was evaluated for the FitzPatrick ESW system and the results documented in Reference 2.

III. SAFETY IMPLICATION OF THE PROPOSED CHANGES

The service water system consists of three subsystems: the emergency service water system, the normal service water system, and the RHR service water system. The specific surveillances discussed in this amendment request are associated with the ESW system. The other two systems do not require surveillance test extensions to 24 months since there are no technical specification required once per cycle surveillance tests associated with these systems. (The monthly operability test of the RHR service water pumps and associated MOVs in Specification 4.5.B.1.c.1 is not impacted by this amendment request).

The ESW system is a safety related system providing heat removal for the emergency core cooling system (ECCS) components and other equipment essential to safe reactor shutdown. The system consists of two independent supply loops, each supplied by a 100% capacity, motor driven, vertical turbine pump. Each pump takes suction from a separate location in the screenwell and discharges through independent strainers into separate supply headers. The system also includes five MOVs (two pump discharges, two bypass valves, and one cross-connect). Each train of the ESW system is required to supply raw water cooling to one train of the following safety related loads:

- Emergency Diesel Generator Jacket Water Heat Exchangers,
- Electric Bay Unit Coolers,
- Cable Tunnel/Switchgear Room Coolers,
- Control Room and Relay Room Air Handling Units, and
- Crescent Area Unit Coolers

Normally, the ESW system is maintained in standby condition and operates automatically in response to an indicated loss of reactor building closed loop cooling water system or upon start of one or more emergency diesel generators.

The longer cycle length requires an extension to the ESW simulated automatic actuation test and logic system functional test. This surveillance test demonstrates that the reactor building closed loop cooling (RBCLC) pump discharge header pressure switches and ESW Lockout Matrix relays will cause ESW pumps to start and RBCLC and ESW motor operated valves to reposition to an ESW injection lineup. Ten surveillance test results were reviewed from 1987 to 1993. Two problems were noted with contacts on an ESW lockout relay failing to operate. The relay was replaced with a new one and the surveillance frequency was increased to quarterly. After seven consecutive tests were performed satisfactorily, the testing frequency was returned to once per operating cycle.

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Extension of this test to 24 months will not adversely affect system performance or reliability because:

- the relays used by this system have proven to be reliable as documented by numerous tests, and
- all pumps and valves operated by this system are frequently tested with the plant on-line. (Flow rate tests are performed quarterly, pump and MOV operability are checked monthly, instrumentation is checked daily and is calibrated quarterly).

In addition to the surveillance interval extensions for Specifications 4.11.D.1.a and 4.11.D.1.f, Specification 4.11.D.1.e has been administratively rearranged to better clarify the requirements for ESW instrumentation check and instrument channel calibration. The "once/3 months" frequency, which appears twice in this specification, has been aligned with the proper (single) surveillance test. No new or different tests or surveillance intervals are proposed by this administrative clarification.

Based on the discussion above, the ESW surveillance tests can be safely extended to accommodate a 24 month operating cycle.

The assumptions in the Fitzpatrick licensing basis are not invalidated by performing the ESW surveillances at the bounding interval limits (30 months) to accommodate the 24 month operating cycle.

IV. EVALUATION OF NO 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 would not:

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

The proposed changes increase the interval between ESW system surveillance tests. These changes are consistent with the guidance provided in Generic Letter 91-04. These changes do not involve any physical changes to the plant, nor do they alter the typical way the ESW system functions. On-line testing will continue to assure equipment availability. The type of testing and the corrective actions required if the subject ESW surveillances fail remain the same. As such, the proposed changes create no new impacts on accidents previously evaluated.

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Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

The proposed changes increase the interval between ESW system surveillance tests. These changes are consistent with the guidance provided in Generic Letter 91-04. The proposed changes do not change the ability of the ESW system to provide heat removal for the ECCS components and other equipment essential to reactor shutdown. Past equipment performance and on-line testing indicate the longer test intervals will not degrade ESW equipment. No changes are proposed to the type of testing performed, only to the length of the surveillance interval. The proposed changes do not modify the design or operation of plant equipment, therefore, no new or different failure modes are introduced.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

The proposed changes increase the interval between ESW system surveillance tests. These changes are consistent with the guidance provided in Generic Letter 91-04. The proposed changes do not alter the configuration of the ESW system nor change the manner in which the ESW equipment functions. Past equipment performance and on-line testing indicate the longer test intervals will not degrade ESW equipment. Operation of the plant remains unchanged by the proposed changes.

Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

V. IMPLEMENTATION OF THE PROPOSED CHANGE

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.

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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 increase the probability nor the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the Safety Analysis Report;
2. will not create the possibility of an accident or malfunction of a type different from any previously evaluated in the Safety Analysis Report;
3. will not reduce the margin of safety as defined in the basis for any technical specification; and
4. involve no significant hazards consideration, as defined in 10 CFR 50.92.

VII. REFERENCES

1. Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate 24-Month Fuel Cycle," dated April 2, 1991.
2. NYPA Report No. JAF-RPT-SWS-01538, "Service Water System Surveillance Test Improvements," dated June, 1994.

ATTACHMENT III to JPN-95-025

Markup of the current Technical Specification pages
Extension of Emergency Service Water System Surveillance Test Intervals to
Accommodate 24-Month Operating Cycles (JPTS-95-001F)

New York Power Authority

JAMES A. FITZPATRICK NUCLEAR POWER PLANT
Docket No. 50-333
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3.11 (cont'd)

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4.11 (cont'd)

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3. If specification 3.11.D.2 cannot be met the reactor shall be placed in the cold condition within 24 hours.

4.11 (cont'd)

- e. ESW instrumentation-check
 - Once/day
 - Once/3 months
- Calibrate test
 - Once/3 months
- f. Logic System Functional Test
 - Once every 24 months
 - Once/each operating cycle

2. ESW will not be supplied to RBCLC system during testing.

ESW instrument channel calibration

3. Not Used