Mr. James Knubel
Chief Nuclear Officer
Power Authority of the State of New York
123 Main Street
White Plains, NY 10601

SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT - ISSUANCE OF AMENDMENT RE: ONE TIME RESIDUAL HEAT REMOVAL SERVICE WATER ALLOWED OUTAGE TIME TO ALLOW IMPLEMENTATION OF A MODIFICATION TO THE "A" RESIDUAL HEAT REMOVAL SERVICE WATER (RHRSW) STRAINER (TAC NO. MA6667)

Dear Mr. Knubel:

The Commission has issued the enclosed Amendment No. 259 to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant. The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated September 29, 1999, as supplemented by information provided in your letter dated December 7, 1999.

The amendment extends, on a one-time-basis, the Limiting Condition for Operation (LCO) allowable out-of-service time (AOT) for the residual heat removal service water (RHRSW) system from 7 days to 11 days. The applicability of this change is limited to the one-time-only installation of the modification to the "A" RHRSW strainer.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

/RA/

Guy S. Vissing, Sr. Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-333

Enclosures: 1. Amendment No. 259 to DPR-59
2. Safety Evaluation

cc w/encls: See next page

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Template No.
NRR-058

DATED: January 28, 2000

AMENDMENT NO. 259 TO FACILITY OPERATING LICENSE NO. DPR-59-FITZPATRICK

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 28, 2000

Mr. James Knubel
Chief Nuclear Officer
Power Authority of the State of New York
123 Main Street
White Plains, NY 10601

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Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-333

Enclosures: 1. Amendment No. 259 to DPR-59
2. Safety Evaluation

cc w/encls: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

POWER AUTHORITY OF THE STATE OF NEW YORK

DOCKET NO. 50-333

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 259
License No. DPR-59

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by The Power Authority of the State of New York (the licensee) dated September 29, 1999, as supplemented December 7, 1999, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-59 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 259 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Marsha K. Gamberoni, Acting Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 28, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 259

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages	Insert Pages
116	116
127	127

3.5 (cont'd)

2. Should one RHRSW pump of the components required in 3.5.B.1 above be made or found inoperable, continued reactor operation is permissible only during the succeeding 30 days provided that during such 30 days all remaining components of the containment cooling mode subsystems are operable.

3. Should one of the containment cooling subsystems become inoperable or should one RHRSW pump in each subsystem become inoperable, continued reactor operation is permissible for a period not to exceed 7 days.*

4. If the requirements of 3.5.B.2 or 3.5.B.3 cannot be met, the reactor shall be placed in a cold condition within 24 hr.

5. Low power physics testing and reactor operator training shall be permitted with reactor coolant temperature $<212^{\circ}F$ with an inoperable component(s) as specified in 3.5.B above.

4.5 (cont'd)

	Item	Frequency
e.	a verification that each valve (manual, power operated, or automatic) in the flowpath that is not locked, sealed or otherwise secured in position, is in the correct position.	Once per 31 Days
f.	an air test shall be performed on the containment spray headers and nozzles.	Once per 5 Years

2. When it is determined that one RHRSW pump of the components required in 3.5.B.1 above is inoperable, the remaining components of the containment cooling mode subsystems shall be verified to be operable immediately and daily thereafter.

3. When one containment cooling subsystem becomes inoperable, the redundant containment cooling subsystem shall be verified to be operable immediately and daily thereafter. When one RHRSW pump in each subsystem becomes inoperable, the remaining components of the containment cooling subsystems shall be verified to be operable immediately and daily thereafter.

**During the installation of modification 99-095 to the "A" RHRSW strainer, continued reactor operation is permissible for a period not to exceed 11 days.*

3.5 BASES (cont'd)

B. Containment Cooling Mode (of the RHR System)

The containment heat removal portion of the LPCI/containment spray mode is provided to remove heat energy from the containment in the event of a loss-of-coolant accident. For the flow specified, the containment long-term pressure is limited to less than 8 psig and, therefore, is more than ample to provide the required heat removal capability.

Each subsystem of the containment cooling mode (of the RHR System) consists of two RHR Pumps, two RHR service water pumps, one heat exchanger and a flowpath capable of recirculating water from the suppression pool through the heat exchanger and back to primary containment. Either subsystem is capable of performing the containment cooling function. Loss of one RHR service water pump does not seriously jeopardize the containment cooling capability as any two of the remaining three pumps can satisfy the cooling requirements. Since there is some redundancy left, a thirty-day repair period is adequate. Loss of one subsystem of the containment cooling mode leaves one remaining system to perform the containment cooling function. The operable system is verified to be operable each day when the above condition occurs. Based on the fact that when one containment cooling subsystem becomes inoperable only one system remains, a seven day repair period was specified.*

Low power physics testing and reactor operator training with inoperable components will be conducted only when the containment cooling mode of RHR is not required for the safety of the plant.

Calculations have been made to determine the effects of the design basis LOCA while conducting low power physics testing or operator training at or below 212°F. The results of these conservative calculations show that the suppression pool water temperature will not exceed 170°F. Therefore LPCI and Core Spray Systems will not be adversely affected by the postulated LOCA.

**During the installation of modification 99-095 to the "A" RHRSW strainer, the seven day repair period may be extended to eleven days. The Conditional Core Damage Probability with the plant in this configuration for eleven days has been determined to be below the threshold probability of 1 E-6 for risk significance of temporary changes to the plant configuration in the EPRI PSA Applications Guide.*

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 259 TO FACILITY OPERATING LICENSE NO. DPR-59

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCKET NO. 50-333

1.0 INTRODUCTION

By application dated September 29, 1999 [1], as supplemented by letter dated December 7, 1999 [2], the Power Authority of the State of New York (the licensee, also known as the New York Power Authority) requested a change to the Technical Specifications (TS) for the James A. FitzPatrick Nuclear Power Plant. The proposed change extends, on a one-time basis, the allowed outage time (AOT) for the residual heat removal service water (RHRSW) system from 7 days to 11 days to allow for installation of a modification to the loop "A" RHRSW strainer. The applicability of the proposed change is limited to the one-time-only installation of this modification on the loop "A" RHRSW strainer. The proposed change is supported by a licensee risk assessment which indicates that the risk associated with the modification is minimized if installation is performed while at power. Plant risk will be managed during the proposed extended outage in accordance with FitzPatrick's approved Configuration Risk Management Program. The letter of December 7, 1999, provided clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

2.1 Background

Since the mid-1980s, the U.S. Nuclear Regulatory Commission (NRC) has been reviewing and granting improvements to TS that are based, at least in part, on probabilistic risk assessment (PRA) insights. In its final policy statement on TS improvements of July 22, 1993, the Commission stated:

> "licensees, in preparing their Technical Specification related submittals, will utilize any plant-specific probabilistic safety assessment[1] (PSA) or risk survey and any available literature on risk insights and PSAs...Similarly, the NRC staff will also employ risk insights and PSAs in evaluating Technical Specifications related submittals. Further, as a part of the Commission's ongoing program of improving Technical Specifications, it will continue to consider methods to make better use of risk and reliability information for defining future generic Technical Specification requirements."

[1] PSA and PRA are used interchangeably herein.

The NRC reiterated this point when it issued the revision to Title 10 Code of Federal Regulations (10 CFR) Section 50.36, "Technical Specifications," in July 1995 (60 FR 36953). In August 1995, the NRC adopted a final policy statement on the use of PRA methods in nuclear regulatory activities that encouraged greater use of PRA to improve safety decision-making and regulatory efficiency (60 FR 42622). The PRA policy statement included the following points:

- The use of PRA technology should be increased in all regulatory matters to the extent supported by the state of the art in PRA methods and data and in a manner that complements the NRC's deterministic approach and supports the NRC's traditional defense-in-depth philosophy.

- PRA and associated analyses (e.g., sensitivity studies, uncertainty analyses, and importance measures) should be used in regulatory matters, where practical within the bounds of the state of the art, to reduce unnecessary conservatism associated with current regulatory requirements.

- PRA evaluations in support of regulatory decisions should be as realistic as practicable and appropriate supporting data should be publicly available for review.

Accordingly, the staff has relied on both deterministic and probabilistic considerations in evaluating the acceptability of the proposed change.

2.2 Proposed Change

The RHRSW system consists of two independent and redundant loops or subsystems. Each loop has two RHRSW pumps with a common header. The header discharges into a duplex strainer, which then discharges to the system loads. Each duplex strainer has a flow porting mechanism for directing RHRSW flow through either of the two strainer baskets to allow on-line cleaning of the other basket. The flow porting mechanism is configured with a compression packing/stuffing box to minimize leakage between a piston ram and the strainer body. The packing gland on the loop "A" RHRSW strainer is degrading due to corrosion, and has been tack-welded in place in accordance with FitzPatrick's Temporary Modification Program to ensure strainer operability. In order to correct this degraded condition, a permanent modification has been developed which will replace the degraded packing gland with a new design. The "A" loop or subsystem of RHRSW must be removed from service while the strainer modification is being installed.

The licensee has estimated that the strainer modification installation will require approximately 7 days to complete. This does not allow for unforeseen eventualities during installation which could extend the RHRSW system outage beyond the 7 day allowable out of service time in the current TS and result in a forced plant shutdown. The proposed change to the FitzPatrick TS allows for unforeseen complications in the modification installation and, should complications arise, would permit the plant to remain at power while the repair is being completed. The change extends the Limiting Condition for Operation (LCO) allowable out-of-service time for the RHRSW system from 7 days to 11 days to allow for installation of the strainer modification. The applicability of the proposed change is limited to the one-time-only installation of the strainer modification on loop "A" of RHRSW.

The licensee proposes the following change to TS 3.5.B.3 and associated bases:

TS 3.5.B.3 currently reads:

> "Should one of the containment cooling subsystems become inoperable or should one RHRSW pump in each subsystem become inoperable, continued reactor operation is permissible for a period not to exceed 7 days."

TS 3.5.3 will be revised to include the following footnote:

> " * During the installation of modification 99-095 to the "A" RHRSW strainer, continued reactor operation is permissible for a period not to exceed 11 days."

The associated bases section currently states that:

> "... Based on the fact that when one containment cooling subsystem becomes inoperable only one system remains, a seven day repair period was specified."

This statement will be revised to include the following footnote:

> " * During the installation of modification 99-095 to the "A" RHRSW strainer, the seven day repair period may be extended to eleven days. The Conditional Core Damage Probability with the plant in this condition for eleven days has been determined to be below the threshold probability of 1E-6 for risk significance of temporary changes to the plant configuration in the EPRI PSA Applications Guide."

2.3 Evaluation

The NRC staff evaluated the licensee's proposed amendment to the TS using a combination of deterministic and probabilistic considerations. The deterministic analysis evaluated the capabilities of the plant to mitigate design basis events with one RHRSW loop inoperable. The probabilistic analysis evaluated the risk significance of the proposed changes using PRA methods.

2.3.1 Deterministic Evaluation of RHRSW AOT Extension

The RHRSW system is designed to provide cooling water to the residual heat removal (RHR) system heat exchangers required for normal reactor shutdown cooling and for safe reactor shutdown following a design-basis accident or transient. The RHRSW system is operated whenever the RHR heat exchangers are required to operate in the shutdown cooling mode or in the suppression pool cooling or spray mode of the RHR system. The RHRSW system circulates service water through the tube side of the RHR heat exchangers, and supports long term cooling of the reactor or containment by exchanging heat with the reactor coolant or suppression pool water, and discharging this heat to the external heat sink. The RHRSW system consists of two 100 percent capacity, totally independent supply loops. Each of the independent loops is supplied from two RHRSW pumps. Each pair of pumps is powered from a separate emergency bus connected to the emergency diesel generators (EDGs). Only one of the two parallel loops is necessary for safe shutdown.

The licensee has estimated that the RHRSW strainer modification installation will require approximately 7 days to complete. The licensee is requesting that the AOT be extended from 7 to 11 days to allow for unforeseen eventualities in the modification installation schedule. This would prevent the need for a forced plant shutdown or a request for NRC enforcement discretion (to permit the plant to remain at power while repairs are completed) should the modification require more than 7 days to complete.

TS 3.5.3 requires that when one containment cooling subsystem becomes inoperable, the redundant containment cooling subsystem be verified to be operable immediately and daily thereafter. As discussed later, the licensee determined that initiators of importance during this LCO are a loss of the AC safeguards bus 10600 or a loss of "B" DC power systems. As part of the Configuration Risk Management Program, the licensee will assess work activities during the LCO to ensure:

- full capability to implement AOP-19, Loss of 10600 Bus, is maintained.
- full capability to implement AOP-46, Loss of DC Power System B, is maintained.
- planned activities that have a potential to result in a plant transient, Reactor Protection System (RPS) actuation, Primary Containment and Reactor Vessel Isolation Control System (PCRVICS) trip, Emergency Core Cooling System (ECCS) actuation or failure are compatible with the planned LCO.
- no planned degradation, through testing or maintenance, of any other safety function is scheduled or permitted.
- no planned degradation of the electric power distribution safety function is scheduled or permitted.

A contingency work package and temporary modification will also be available to install a plug in the RHRSW strainer such that firewater can be supplied to the RHR heat exchanger. Specifically, in the event the "B" loop of RHRSW were rendered inoperable during the loop "A" RHRSW strainer modification, an alternate means of achieving flow on loop "A" of the RHRSW is available via a temporary connection to the Fire Protection system header. The temporary connection would provide limited containment cooling via the RHR heat exchanger, or alternatively, the flow from the Fire Protection system could be directed to the reactor core or the suppression pool. The temporary connection is achieved by connecting a temporary hose to permanently installed cross tie connections in the RHRSW system and the Fire Protection system. Instructions for installing the crosstie exist in current plant procedures, and training on use of the crosstie has been provided. The material required for crosstie installation is permanently prestaged in an equipment cabinet in the RHRSW pump room. The temporary plug will be located at the work site and instructions for installation and use of the plug will be available prior to the start of the modification.

The staff concludes that a one-time extension of the AOT from 7 days to 11 days to permit the loop "A" RHRSW strainer modification to be performed while remaining at power is reasonable, and that the controls and contingencies the licensee will have in place during the modification will ensure sufficient defense-in-depth and safety margin are maintained.

2.3.2 Probabilistic Evaluation of RHRSW AOT Extension

To gain a risk perspective, the staff used a three-tiered approach to evaluate the risk associated with the proposed TS change. The first tier evaluated the PRA model and the impact of the change on plant operational risk. This included a limited consideration of PRA quality issues to confirm that the specific PRA is adequate to support the requested TS change. The second tier addressed the need to preclude potentially high risk configurations, should additional equipment outages occur during the loop "A" RHRSW strainer modification. The third tier considered the licensee's configuration risk management program to ensure that the applicable plant configuration will be appropriately controlled from a risk perspective before entering into or during the proposed AOT. Each tier and the associated findings are discussed below.

Tier 1: PRA Evaluation of AOT Extension

(1) Evaluation of PRA Model and Application to the Proposed AOT Extension

The staff's review focused on the capability of the licensee's PRA model to analyze the risk associated with the proposed AOT changes for the RHRSW system. The staff relied on prior reviews of the FitzPatrick PRA, and on supplementary information provided by the licensee to assess the adequacy of the PRA models for the RHRSW AOT request. An in-depth review of the PRA was not performed since: (1) the requested TS change is limited to a one-time extension of the AOT, and (2) the relatively small risk impacts estimated by the licensee for performing the modification at power appear reasonable given the small core damage frequency (CDF) for FitzPatrick.

The PRA used to support the requested TS change is an updated version of the Individual Plant Examination (IPE). The staff performed a two-step review of the original IPE in 1994 [3]. The first step focused on completeness and quality of the submittal; the second step involved a more detailed review and audit of level 1 and 2 PRA models and documentation, a site visit, walk-through of important areas. As part of the evaluation, the staff reviewed portions of the fault trees for selected systems, including the RHR/low-pressure coolant injection (LPCI) system, and found that the models properly account for relevant failure modes and dependencies. The staff also reviewed the licensee's decay heat removal evaluation, and found the analysis method and results consistent with the intent of the USI A-45 resolution, and acceptable for resolving the generic issue.

The staff performed a limited review of the updated version of the IPE in conjunction with a recent request to modify the AOT for EDGs at FitzPatrick [4]. Although this evaluation did not involve an in-depth review and focused on EDGs rather than the RHRSW system, the staff did not identify any deficiencies related to the PRA update and concluded that the PRA was sufficient to support the AOT extension for EDGs.

The staff queried the licensee regarding the quality of the FitzPatrick PRA used to support the requested change for the RHRSW AOT, including updates of the PRA since the last review cycle, description of the peer review process and findings, and description of PRA quality assurance methods. The licensee provided additional information by letter dated December 7, 1999 [2]. The licensee's PRA which forms the basis for their risk assessment is an updated version (Revision 1) of the original IPE. The update, dated April 1998, incorporates

changes to reflect new initiating event and component failure data, revised TSs, and modifications to the plant design and procedures made subsequent to preparation of the initial IPE. The update was prepared in conformance with the licensee's procedures governing review and approval of licensee generated documents. Before completion of the update, the licensee participated in the BWR Owner's Group PSA peer review certification process. The PSA certification process used a team of experienced PSA and systems analysts to provide both an objective review of the technical elements of the study and a subjective assessment regarding the acceptability of these elements for potential applications. The peer review comments were evaluated by the licensee and addressed in the final analysis and report, as summarized in Section 5.3 of the IPE update.

Based on the prior reviews of the licensee's PRA and the additional information supplied by the licensee, the staff considers the PRA models adequate for this application.

(2) Evaluation of PRA Results and Insights

The licensee assessed the impact on CDF associated with removing loop "A" RHRSW from service. The assessment was performed to support an earlier licensee plan which would have involved initiating the strainer modification while at power, shutting down the plant on the seventh day of the modification, and completing the strainer modification under shutdown conditions. The licensee quantified the conditional CDF and incremental conditional core damage probability (ICCDP) for the conditions of "at power", power descent, and shutdown, to support that planned evolution. The licensee subsequently revised their plans, based in part on insights from the risk assessment, and now proposes to extend the AOT to ensure that the plant can remain at power while the strainer modification is performed.

The licensee estimated that removing loop "A" RHRSW from service while at power results in an increase in CDF of 2.14E-6 per year over the base case. For an 11-day outage time, the ICCDP is 6.4E-8. The licensee also addressed risk in terms of the impact of the AOT on large early release frequency. The licensee estimated that the large early release frequency (LERF) would increase by approximately 9.1E-7 per year over the base case. For an 11-day outage time, the incremental conditional large early release probability (ICLERP) is 2.5E-8.

The licensee states that the ICCDP of 6.4E-8 falls below the threshold probability of 1E-6 for risk significance of temporary changes to the plant configuration in the Electric Power Research Institute (EPRI) Probabilistic Safety Assessment Applications Guide and is therefore not considered to be risk significant. The staff agrees that the increased risk for the 11-day AOT versus the 7-day AOT is not significant. Regulatory Guide (RG) 1.177 [5] states that a proposed AOT change should have only a small quantitative impact on plant risk. Per Reference 5, an ICCDP of less than 5.0E-7 and an ICLERP of less than 5.0E-8 are considered small for a single (permanent) AOT change. The incremental risk increase estimated by the licensee for the proposed AOT extension meets the guidelines for both risk measures. The staff notes that the applicability of the proposed TS change and the incremental risk increase is limited to the one-time-only installation of the RHRSW strainer modification on loop "A" of RHRSW.

On the basis of the Tier 1 review above, the staff concludes that the PRA model used for the proposed AOT extension is reasonable, and that the risk impact of the change is very small and supports the AOT extension.

Tier 2: Avoidance of Risk-Significant Plant Configurations

Plant risk during the loop "A" RHRSW strainer modification will be managed in accordance with FitzPatrick's existing Configuration Risk Management Program (CRMP). The CRMP provides a proceduralized risk-informed assessment to manage the risk associated with equipment inoperability. The program applies to TS structures, systems, or components for which a risk-informed allowed outage time has been granted, and includes the following:

- Provisions for the control and implementation of a Level 1 at-power internal events PRA-informed methodology. The assessment is to be capable of evaluating the applicable plant configuration.

- Provisions for performing an assessment prior to entering the plant configuration described by the LCO Action Statement for preplanned activities.

- Provisions for performing an assessment after entering the plant configuration described by the LCO Action Statement for unplanned entry into the LCO Action Statement.

- Provisions for assessing the need for additional actions after the discovery of additional equipment out-of-service conditions while in the plant configuration described by the LCO Action Statement.

- Provisions for considering other applicable risk-significant contributors such as Level 2 issues and external events, qualitatively or quantitatively.

The CRMP is documented as Administrative Procedure AP10.02, Rev. 7, "13-Week Rolling Schedule, and is included as Section 6.21 of the Administrative Controls section of the FitzPatrick TSs. FitzPatrick's CRMP was recently evaluated by the staff as part of the technical review of an EDG AOT extension request [4]. The staff concluded that the licensee's CRMP is consistent with the guidance and recommendations of RG 1.177 and is acceptable.

As part of the subject TS change request, the licensee reviewed the minimal cutsets for the case with RHRSW loop "A" out of service to identify any special vulnerability which Operations personnel need to be aware of during the outage. In addition to recommending that no additional on-line maintenance be performed during the strainer modification (consistent with the assumptions in the risk assessment), the licensee recommended that special attention be paid to not perform any activity that could challenge the availability of either the division II AC safeguards bus 10600 or battery control board 71BCB-2B, based on the contribution to CDF from failures of these buses. These recommendations have been provided to the licensee's work control center, and will be factored into the licensee's configuration management processes for the RHRSW outage as stated previously.

The staff considers that the controls and processes provided by the CRMP and TSs provide reasonable assurance that risk-significant plant configurations will not be entered during the proposed AOT and that appropriate actions will be taken should unforeseen events put the plant in a risk-significant configuration. The staff also notes that the contingency procedure for cross tying the fire protection system to the RHRSW system would help mitigate the event should the RHRSW loop B become unavailable and shutdown cooling become necessary.

The Tier 2 evaluation performed as part of the present evaluation did not identify the need for any additional constraints or compensatory actions to avoid or reduce the probability of a risk-significant configuration.

Tier 3: Risk-Informed Plant Configuration Management

Based on the previous review of the FitzPatrick CRMP [4], the staff finds that the licensee's CRMP mentioned above satisfies the requirements for Tier 3.

The staff has reviewed the proposed RHRSW AOT extension at FitzPatrick and concludes that the AOT extension will not result in a significant increase in plant risk. On the basis of the three-tiered approach, the staff finds the following:

- The licensee's proposal to perform the strainer modification while at power, and to extend the AOT from 7 to 11 days to avoid a forced plant shutdown should the modification require more than 7 days, results in only a minimal quantitative impact on plant risk. The calculated incremental conditional core damage probability and large early release probability values are small, and within existing staff guidance regarding acceptable levels of risk increase for TS changes. The increase in at-power risk associated with the TS change is offset by averting the transition or shutdown risk associated with forcing the plant to shut down with repairs in progress, or deferring the repairs until a scheduled outage (Tier 1).

- The licensee has controls and contingencies in place to reduce the likelihood of risk-significant plant configurations during the proposed AOT. The review did not identify the need for any additional constraints or compensatory actions that, if implemented, would avoid or reduce the probability of a risk-significant configuration (Tier 2).

- The licensee has implemented a risk-informed Configuration Risk Management Program to assess the risk associated with the removal of equipment from service during the proposed AOT. The program provides the necessary assurances that appropriate assessments of plant risk configurations are sufficient to support the proposed AOT extension request for the RHRSW system (Tier 3).

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding

(64 FR 56532). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6.0 REFERENCES

1. PASNY letter JPN-99-030, J. Knubel (PASNY) to NRC (DCD), Subject: Proposed One-Time-Only Change to the Technical Specifications Regarding RHRSW Allowable Out-of-Service Time (JPTS-99-005), September 29, 1999.

2. PASNY letter JAFP-99-0319, M. Colomb (NYPA) to NRC (DCD), Subject: Additional Information Needed to Complete Review of FitzPatrick Proposed One-Time Only Change to Technical Specifications Regarding RHRSW Allowable Out of Service Time, December 7, 1999.

3. Letter from R. Capra (NRC) to W. Josiger (NYPA), Subject: Individual Plant Examination for the James A. FitzPatrick Nuclear Power Plant (TAC No. M74411), May 9, 1994.

4. Letter from G. Vissing (NRC) to J. Knubel (NYPA), Subject: James A. FitzPatrick Nuclear Power Plant - Issuance of Amendment Re: The Allowed Outage Time for an Emergency Diesel Generator System (TAC No. M94611), July 30, 1999.

5. Regulatory Guide 1.177, *"An Approach for Plant-Specific Risk-Informed Decisionmaking: Technical Specifications"*, August 1998.

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