

**BEFORE THE UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

In the matter of )  
**NEW YORK POWER AUTHORITY** ) Docket No. 50-333  
James A. FitzPatrick Nuclear Power Plant )

**APPLICATION FOR AMENDMENT TO OPERATING LICENSE**

The New York Power Authority 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 regulation.

This application for an amendment to the James A. FitzPatrick TS relocates Specification 3.11.B/4.11.B "Crescent Area Ventilation" and associated Bases from the TS to an Authority controlled procedure. These requirements are implicit in the definition of OPERABLE in the FitzPatrick TS, and their relocation will not adversely affect Emergency Core Cooling System (ECCS) or Reactor Core Isolation Cooling (RCIC) system operability. This change, as with the existing TS, will not permit the ECCS and RCIC system to be considered operable without adequate area ventilation.

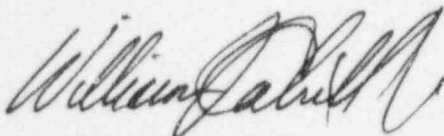
This proposed change is consistent with Standard Technical Specifications (STS) (Reference 1), and NEDO-31466 (Reference 2). The FitzPatrick TS definition of OPERABLE provides the necessary controls, and appropriate actions should the area coolers become inoperable for any reason. The NRC approved similar changes for the Peach Bottom Atomic Power (Reference 3) and the Cooper Nuclear Stations (Reference 4).

The Authority requests approval of these proposed changes to the TS by June 30, 1996 in anticipation of higher lake water temperatures which may occur during the Summer of 1996.

Attachments I and II to this application contain the proposed changes to the TS and the associated safety evaluation, respectively. A mark-up of the affected TS pages is included in Attachment III. Commitments made by the Authority in this submittal are included in Attachment IV.

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.

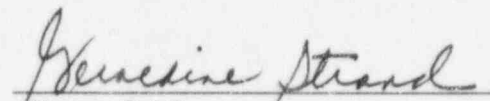
**New York Power Authority**



William J. Cahill, Jr.  
Chief Nuclear Officer

**STATE OF NEW YORK  
COUNTY OF WESTCHESTER**

Subscribed and sworn to before me  
this 24<sup>th</sup> day of April 1996.

  
Notary Public

**GERALDINE STRAND  
Notary Public, State of New York  
No. 4991272  
Qualified in Westchester County,  
Commission Expires Jan. 27, 1998**

9604300400 960424  
PDR ADOCK 05000333  
P PDR

Attachment I to JPN-96-017

**PROPOSED TECHNICAL SPECIFICATION CHANGES**

**(JPTS-96-007)**

**New York Power Authority**

**JAMES A. FITZPATRICK NUCLEAR POWER PLANT**

**Docket No. 50-333**

**DPR-59**

JAFNPP

TABLE OF CONTENTS (Cont'd)

		Page
F.	ECCS-Cold Condition	122
G.	Maintenance of Filled Discharge Pipe	122a
H.	Average Planar Linear Heat Generation Rate (APLHGR)	123
I.	Linear Heat Generation Rate (LHGR)	124
J.	Thermal Hydraulic Stability	124a

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.6	Reactor Coolant System	4.6	136
	A. Pressurization and Thermal Limits	A.	136
	B. DELETED		
	C. Coolant Chemistry	C.	139
	D. Coolant Leakage	D.	141
	E. Safety and Safety/Relief Valves	E.	142a
	F. Structural integrity	F.	144
	G. Jet Pumps	G.	144
	H. DELETED		
	I. Shock Suppressors (Snubbers)	I.	145b
3.7	Containment Systems	4.7	165
	A. Primary Containment	A.	165
	B. Standby Gas Treatment System	B.	181
	C. Secondary Containment	C.	184
	D. Primary Containment Isolation Valves	D.	185
3.8	Miscellaneous Radicactive Material Sources	4.8	214
3.9	Auxiliary Electrical Systems	4.9	215
	A. Normal and Reserve AC Power Systems	A.	215
	B. Emergency AC Power System	B.	216
	C. Diesel Fuel	C.	218
	D. Diesel-Generator Operability	D.	220
	E. Station Batteries	E.	221
	F. LPCI MOV Independent Power Supplies	F.	222a
	G. Reactor Protection System Electrical Protection Assemblies	G.	222c
3.10	Core Alterations	4.10	227
	A. Refueling Interlocks	A.	227
	B. Core Monitoring	B.	230
	C. Spent Fuel Storage Pool Water Level	C.	231
	D. Control Rod and Control Rod Drive Maintenance	D.	231
3.11	Additional Safety Related Plant Capabilities	4.11	237
	A. Main Control Room Ventilation	A.	237
	B. DELETED		
	C. Battery Room Ventilation	C.	239

JAFNPP

3.11 LIMITING CONDITIONS FOR OPERATION

3.11 ADDITIONAL SAFETY RELATED PLANT CAPABILITIES

Applicability:

Applies to the operating status of the main control and relay rooms, and battery room ventilation and cooling. Applies to emergency service water system and intake deicing heaters.

Objective:

To assure the availability of the main control and relay room, and battery room ventilation systems, to assure the availability of the emergency service water system and intake deicing heaters, under the conditions for which the capability is an essential response to plant abnormalities.

A. Main Control Room Ventilation

1. The reactor shall not have a coolant temperature greater than 212 °F and fuel may not be handled unless both of the control room emergency ventilation air supply fans and fresh air filter trains are available for normal operation except that one emergency

4.11 SURVEILLANCE REQUIREMENTS

4.11 ADDITIONAL SAFETY RELATED PLANT CAPABILITIES

Applicability:

Applies to the surveillance requirements for the main control and relay room, battery room ventilation systems, emergency service water and intake deicing heaters.

Objective:

To verify the operability or availability under conditions for which these capabilities are an essential response to plant abnormalities.

A. Main Control Room Ventilation

1. Each of the control room emergency ventilation air supply fans and dampers shall be tested for operability every 3 months.

The fresh air filter trains shall be tested once every 6 months as follows:

- a. Pressure drop test across each filter and the filter system.

JAFNPP

3.11 (cont'd)

I B. DELETED

C. Battery Room Ventilation

Battery room ventilation shall be operable on a continuous basis whenever specification 3.9.E is required to be satisfied.

1. From and after the date that one of the battery room ventilation systems is made or found to be inoperable, its associated battery shall be considered to be inoperable for purposes of specification 3.9.E.

4.11 (cont'd)

B. DELETED

C. Battery Room Ventilation

Battery room ventilation equipment shall be demonstrated operable once/week.

1. When it is determined that one battery room ventilation system is inoperable, the remaining ventilation system shall be verified operable and daily thereafter.
2. Temperature transmitters and differential pressure switches shall be calibrated once/operating cycle.

## 3.11 &amp; 4.11 BASES

A. Main Control Room Ventilation System

One main control room emergency ventilation air supply fan provides adequate ventilation flow under accident conditions. Should one emergency ventilation air supply fan and/or fresh air filter train be out of service during reactor operation, a repair time of 14 days is allowed because during that time, a redundant 100% capacity train is required to be operable.

The 3 month test interval for the main control room emergency ventilation air supply fan and dampers is sufficient since two redundant trains are provided and neither is normally in operation.

A pressure drop test across each filter and across the filter system is a measure of filter system condition. DOP injection measures particulate removal efficiency of the high efficiency particulate filters. A Freon-112 test of charcoal filters is essentially a leakage test. Since the filters have charcoal of known efficiency and holding capacity for elemental iodine and/or methyl iodine, the test also gives an indication of the relative efficiency of the installed system. Laboratory analysis of a sample of the charcoal filters positively demonstrates halogen removal efficiency. These tests are conducted in accordance with manufacturers' recommendations.

The purpose of the emergency ventilation air supply system capacity test is to assure that sufficient air is supplied to the main control room so that a slight positive pressure can be maintained, thereby minimizing in-leakage.

## B. DELETED

C. Battery Room Ventilation

Engineering analyses indicate that the temperature rise and hydrogen buildup in the battery, and battery charger compartments without adequate ventilation is such that continuous operation of equipment in these compartments cannot be assured.

D. Emergency Service Water System

The ESWS has two 100 percent cooling capacity pumps, each powered from a separate standby power supply. The ESW system supplies lake water to cool equipment required to function following an accident. This equipment consists of: emergency diesel generators, electric bay unit coolers, cable tunnel/emergency switchgear room coolers, crescent area coolers, control room air handling units and relay room air handling units. Emergency service water is initially supplied to the control room chillers and chiller room air handling units unless ESW is manually realigned to supply the control room and relay room air handling units. ESW will also supply water to the control rod drive pump coolers which are not automatically isolated following an accident. The surveillance requirement compares pump performance with the pump curve to determine pump operability. It also specifies testing at a

Attachment #1 to JPN-96-017

**SAFETY EVALUATION FOR  
PROPOSED TECHNICAL SPECIFICATION CHANGES (JPTS-96-007)**

New York Power Authority

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

Attachment II to JPN-96-017  
**SAFETY EVALUATION**  
Page 1 of 6

**I. DESCRIPTION OF THE PROPOSED CHANGES**

This section provides a description of the proposed changes to the Technical Specifications (TS). Minor changes in format, such as type font, margins or hyphenation, are not described in this submittal. This type of change is typographical in nature and does not affect the content of the TS. This proposed change relocates Specification 3.11.B/4.11.B "Crescent Area Ventilation" and associated Bases from the TS to an Authority controlled procedure. The specific changes are detailed below.

Page ii, Table of contents

Replace the following:

"B. Crescent Area Ventilation                          B. 239"

with

"B. DELETED"

Page 237, 3.11 Applicability

Replace the following:

"Applies to the operating status of the main control and relay rooms, battery room , and crescent area ventilation and cooling. Applies to emergency service water system and intake deicing heaters."

with

"Applies to the operating status of the main control and relay rooms, and battery room ventilation and cooling. Applies to emergency service water system and intake deicing heaters."

Page 237, 3.11 Objective

Replace the following:

"To assure the availability of the main control and relay room, battery room , and crescent area ventilation systems, to assure the availability of the emergency service water system and intake deicing heaters, under the conditions for which the capability is an essential response to plant abnormalities."

with

"To assure the availability of the main control and relay room, and battery room ventilation systems, to assure the availability of the emergency service water system and intake deicing heaters, under the conditions for which the capability is an essential response to plant abnormalities."



Attachment II to JPN-96-017  
**SAFETY EVALUATION**  
Page 2 of 6

Page 237, 4.1.1 Applicability

Replace the following:

"Applies to the surveillance requirements for the main control and relay room, battery room, crescent area ventilation systems, emergency service water and intake deicing heaters."

with

"Applies to the surveillance requirements for the main control and relay room, battery room ventilation systems, emergency service water and intake deicing heaters."

Page 239, 3.11.B.

Replace the following:

"B. Crescent Area Ventilation

Crescent area ventilation and cooling equipment shall be operable on a continuous basis whenever specification 3.5.A, 3.5.B, and 3.5.C are required to be satisfied.

1. From and after the date that more than one unit cooler serving ECCS compartments in the same half of the crescent area are made or found to be inoperable, all ECCS components in that half of the crescent area shall be considered to be inoperable for purposes of specification 3.5.A, 3.5.B, and 3.5.C.
2. If 3.11.B.1 cannot be met, the reactor shall be placed in a cold condition within 24 hours."

with

"B. DELETED"

Page 239, 4.11.B.

Replace the following:

"B. Crescent Area Ventilation

1. Unit coolers serving ECCS components shall be demonstrated operable once/3 months.
2. Each unit cooler's temperature control instrument shall be calibrated once/operating cycle."

with

"B. DELETED"

Page 243, 3.11.B. and 4.11.B. Bases

Replace the following:

"B. Crescent Area Ventilation

Engineering analyses indicate that the temperature rise in safeguards compartments without adequate ventilation flow or cooling is such that continued operation of the safeguards equipment or associated auxiliary equipment cannot be assured."

with

"B. DELETED"

## II. PURPOSE OF THE PROPOSED CHANGES

The purpose of this proposed change is to relocate Specification 3.11.B/4.11.B "Crescent Area Ventilation" and associated Bases from the TS to an Authority controlled procedure. Requirements for adequate Crescent Area Ventilation will remain effective because they are implicit in the definition of OPERABLE in the FitzPatrick TS.

The Authority requests approval of these proposed changes to the TS by June 30, 1996 in anticipation of higher lake water temperatures which may occur during the Summer of 1996.

**SAFETY EVALUATION**

Page 4 of 6

**III. SAFETY IMPLICATIONS OF THE PROPOSED CHANGES**

There are no safety implications associated with these changes because:

- The Crescent Area Ventilation Specifications were included in the original version of the TS when FitzPatrick was licensed. Since that time, the definition of OPERABLE in FitzPatrick TS Section 1.0.J was revised with Amendment Number 83 (Reference 5) to include the following requirements:

*"Operable - A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s)."*

The Crescent Area Ventilation system supports ECCS and RCIC system operability. As a result, the requirement for Crescent Area Ventilation to be operable for the ECCS and RCIC system to be considered operable is implicit in the definition of OPERABLE contained in TS Section 1.0.J, TS Sections 3.5.A "Core Spray System and Low Pressure Coolant Injection (LPCI) Mode of the RHR System", 3.5.B "Containment Cooling Mode (of the RHR System)", 3.5.C "High Pressure Coolant Injection (HPCI System)", and 3.5.E "Reactor Core Isolation Cooling (RCIC) System".

- Compliance with Crescent Area Ventilation system operability and surveillance requirements will be assured by maintaining them in an Authority controlled procedure. The provisions of 10 CFR 50.59 will apply to changes made to the Crescent Area Ventilation system to assure that any changes do not involve an unreviewed safety question. Crescent Area Ventilation operability and testing requirements will continue to be an integral part of FitzPatrick plant operation. Audits and surveillances will continue to be performed in accordance with Authority Quality Assurance Program requirements.
- This proposed change is consistent with Standard Technical Specifications (STS) (Reference 1), and NEDO-31466 (Reference 2). The FitzPatrick TS definition of OPERABLE provides the necessary controls, and appropriate actions should the area coolers become inoperable for any reason. The NRC approved similar changes for the Peach Bottom Atomic Power (Reference 3) and the Cooper Nuclear Stations (Reference 4).

**IV. EVALUATION OF NO 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, based on the following:

- (1) These changes do not involve a significant increase in the probability or consequences of an accident previously evaluated because:

No modifications, no changes to operating procedure requirements, and no reduction in equipment reliability are being made as a result of these changes. Operating limitations will continue to be imposed, and required surveillance will continue to be performed in accordance with regulations, and written procedures and instructions that are auditable by the NRC. Crescent Area Ventilation operability and testing requirements will continue to be an integral part of FitzPatrick plant operation.

Although future changes to the Crescent Area Ventilation system will no longer be controlled by 10 CFR 50.90, proposed changes will be evaluated under 10 CFR 50.59 and plant procedures. Programmatic controls will continue to assure that Crescent Area Ventilation system changes will not adversely affect ECCS or RCIC system operability. As such, there is no significant increase in the probability or consequences of an accident previously evaluated.

- (2) These changes do not create the possibility of a new or different type of accident previously evaluated because:

No modifications, no changes to operating procedure requirements, and no reduction in equipment reliability are being made as a result of these changes. Compliance with Crescent Area Ventilation system operability and surveillance requirements will be assured by maintaining them in an Authority controlled procedure. Changes to the Crescent Area Ventilation system will be subject to the requirements of 10 CFR 50.59. Therefore, the proposed changes do not introduce any failure mechanism of a different type than those previously evaluated since there are no changes being made to the facility and do not create the possibility of a new or different type of accident previously evaluated.

- (3) The proposed amendment does not involve a reduction in a margin of safety because:

The Crescent Area Ventilation system supports Core Spray, LPCI mode of RHR, containment cooling mode of RHR, HPCI, and RCIC operability, and Crescent Area Ventilation system inoperability does affect these systems. As a result, the requirement for Crescent Area Ventilation to be operable for these systems to be considered operable is implicit in TS Sections 3.5.A, 3.5.B, 3.5.C, 3.5.E, and the definition of OPERABLE contained in TS Section 1.0.J. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

**V. IMPLEMENTATION OF THE PROPOSED CHANGES**

Implementation is administrative in nature and involves changes to plant procedures. Authority controlled procedures will be updated to reflect relocation of Crescent Area Ventilation system Specifications and Bases.

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.

**VI. CONCLUSION**

Based on the discussion above, the Specifications and Bases for the Crescent Area Ventilation system can be removed from the FitzPatrick TS. The Plant Operating Review Committee (PORC) and Safety Review Committee (SRC) have reviewed these proposed changes to the TS and have concluded that they do not involve an Unreviewed Safety Question, or a Significant Hazards Consideration, and will not endanger the health and safety of the public.

**VII. REFERENCES**

1. NUREG-1433, "Standard Technical Specifications," General Electric Plants, BWR/4, Revision 1, dated April 1995
2. NEDO-31466, "Technical Specification Screening Criteria Application and Risk Assessment," dated November 1987
3. NRC Letter to Mr. George A. Hunger, Jr., "Issuance of Improved Technical Specifications, Peach Bottom Atomic Power Station, Unit Nos. 2 and 3, (TAC NOS. M90746 and M90747)," dated August 30, 1995
4. NRC Letter to Mr. Guy R. Horn, "Cooper Nuclear Station - Amendment NO. 163 to Facility Operating License NO. DPR-46 (TAC NO. M86319)," dated May 19, 1993
5. NRC Letter to Mr. J. P. Bayne Transmitting TS Amendment Number 83, Regarding use of the Term Operable as it Applies to Safety Systems in Power Reactors, dated August 28, 1984