

May 9, 1989

Docket No. 50-333

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Mr. John C. Brons
Executive Vice President - Nuclear Generation
Power Authority of the State of New York
123 Main Street
White Plains, New York 10601

Dear Mr. Brons:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 68319)

The Commission has issued the enclosed Amendment No. 127 to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated May 19, 1988.

The amendment clarifies and corrects minor problems and errors occurring in the Radiological Environmental Technical Specifications and clarifies the reporting requirements for major modification to the radioactive waste systems.

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

Sincerely,

Original signed by

David E. LaBarge, Project Manager
Project Directorate I-1
Division of Reactor Projects, I/II

Enclosures:

1. Amendment No. 127 to DPR-59
2. Safety Evaluation

cc: w/enclosures
See next page

[AMEND 68319]

OFC	:PDI-1	:PDI-1	:PRRB	:OGC	:PDI-1	:	:
NAME	:CVogan	:DLaBarge/bah	:LCunningham	:RCapra	:	:	:
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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. 127
License No. DPR-59

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Power Authority of the State of New York (the licensee) dated May 19, 1988, 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.127, 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 to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Capra

Robert A. Capra, Director
Project Directorate I-1
Division of Reactor Projects, I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 9, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 127

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Revise Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
Appendix B: 5	5
21	21
23	23
28	28
30	30
31	31
33	33
37	37
38	38
49	49
56	56
58	58
59	59
60	60
68	68
Appendix A: 258c	258c

Table 2.1-1

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

<u>Instrument</u>	<u>Minimum Channels Operable</u>	<u>Action</u>
Gross radioactivity monitors providing alarm and automatic termination of release		
Liquid radwaste effluent line	1	(a)
Gross beta or gamma radioactivity monitors providing alarm but not providing automatic termination of release		
Service water system effluent line	1	(b)
Flow rate measurement devices		
Liquid radwaste effluent line	1	(c)

NOTES FOR TABLE 2.1-1

- (a) With the number of operable channels less than the required minimum number, effluent releases may continue provided that prior to initiating a release:
- Two independent samples are analyzed;
 - Two technically qualified members of the facility staff verify the discharge line valving;
- Otherwise, suspend release of radioactive effluents via this pathway.
- (b) With the number operable of channels less than the required minimum number, effluent releases in this pathway may continue provided that, at least once per 12 hours, grab samples are collected and analyzed for principal gamma emitters at a limit of detection of at least 5×10^{-7} microcuries/ml. The principal gamma emitters for which the LLD specification applies exclusively are described in Note (c) to Table 2.2-1.
- (c) With the number of operable channels less than the required minimum number, effluent releases via this pathway may continue provided the flow rate is estimated at least once per four hours during actual releases. Pump curves or tank level decreases generated in situ may be used to estimate flow.

TABLE 3.2-1

RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM

Gaseous Release Type	Sampling Frequency	Minimum Analysis Frequency	Type of Activity Analysis	Lower Limit of Detection (LLD)(a) ($\mu\text{Ci/ml}$)
Main Stack and Refuel Floor Vent and Reactor Building	Monthly	Monthly	Principal Gamma Emitters(b)	1×10^{-4}
Vent and Turbine Building	Grab Sample(d)	Noble Gases(b)		
Vent and Radwaste Building Vent	Quarterly Grab Sample	Quarterly	H-3	1×10^{-6}
	Continuous(c)	Weekly Charcoal Sample(e)	I-131	1×10^{-12}
			I-133	None
	Continuous(c)	Weekly Particulate Sample(e)	Principal Gamma Emitters(b)	1×10^{-11}
			(I-131, I-133, others)	None
	Continuous(c)	1 Wk/Mo Particulate Sample	Gross Alpha	1×10^{-11}
	Continuous(c)	4 Wk/Qr Composite Particulate Sample	Sr-89, Sr-90	1×10^{-11}
	Continuous(c)	Noble Gas Monitor	Noble Gases Gross Beta or Gamma	1×10^{-5}
Incinerated Oil(f)	Prior to Each Batch(g)	Each Batch(g)	Principal Gamma Emitters(b)	5×10^{-7}
	Batch(g)		I-131	1×10^{-6}

Amendment No. 93 127

NOTES FOR TABLE 3.2-1 (continued)

- (d) Main stack gaseous sampling and analysis shall also be performed following shutdown, startup, or a thermal power change exceeding 20% of rated thermal power in one hour.
1. This requirement applies only if:
 - o Analysis shows that the dose equivalent I-131 concentration in the primary coolant has increased more than a factor of 3; and
 - o The noble gas monitor shows that effluent activity has increased more than a factor of 3; and
 - o Corrections for increases due to changes in thermal power level have been made in both cases.
- (e) Main stack iodine and particulate sampling shall also be performed daily following each shutdown, startup or thermal power change exceeding 20% of rated thermal power in one hour.
1. Daily sampling is not required for thermal power changes if the off gas charcoal filters are in service.
 2. In addition, this requirement applies only if:
 - o Analysis shows that the dose equivalent I-131 concentration in the primary coolant has increased more than a factor of 3; and
 - o The noble gas monitor shows that effluent activity has increased more than a factor of 3; and
 - o Corrections for increases due to changes in thermal power level have been made in both cases.
 3. Daily sampling shall be performed until two consecutive samples show no increase in concentration but not to exceed 7 consecutive days.
 4. LLDs may be increased by a factor of 10 for analysis of daily samples.
 5. Analysis of daily and weekly samples shall be completed within 48 hours of changing.
- (f) Incinerated oil may be discharged via points other than the main stack and building vents (i.e., auxiliary boiler). Whenever oil samples cannot be filtered such as No. 6 bunker fuel oil, raw oil samples shall be collected and analyzed.
- (g) Samples of incinerated oil releases shall be collected from and representative of filtered oil in liquid form. Whenever oil samples cannot be filtered such as No. 6 bunker fuel oil, raw oils samples shall be collected and analyzed.

LIMITING CONDITIONS FOR OPERATION

3.5 MAIN CONDENSER STEAM JET AIR EJECTOR (SJAE)

Applicability

Applies to main condenser offgas discharge rate for noble gases.

Objective

To ensure that the SJAE release rates are maintained at a level compatible for further treatment and release.

Specifications

- a. The gross radioactivity (beta and/or gamma) rate of noble gases measured at the SJAE is given on Table 3.10-1.

SURVEILLANCE REQUIREMENTS

3.5 MAIN CONDENSER STEAM JET AIR EJECTORS (SJAE)

Applicability

Applies to the point of discharge at the SJAE.

Objective

To ensure that the SJAE release rates are properly monitored.

Specifications

- a. The gross radioactivity (beta and/or gamma) rate of noble gases from the SJAE shall be determined to be within the limits of Specification 3.5.a by performing an isotopic analysis of a representative sample of gases taken at the discharge (prior to dilution and/or discharge) of the SJAE, or at the recombiner discharge (prior to delay of the offgas to reduce the total radioactivity) as follows:
 1. At least monthly.
 2. Within 4 hours following an increase as indicated by the SJAE Monitor, of greater than 50% (after factoring out increases due to changes in thermal power level) in the nominal steady state fission gas release from the primary coolant.

LIMITING CONDITIONS FOR OPERATION

3.6 OFFGAS TREATMENT SYSTEM

Applicability

Applies to the system installed for reduction of radioactive materials in gaseous waste prior to discharge.

Objective

To minimize concentration of radioactive materials released from the site.

Specifications

- a. The offgas treatment system shall be used to reduce the concentration of radioactive materials in gaseous effluents prior to release from the plant within 24 hours after the start-up of the second turbine driven feedwater pump.

SURVEILLANCE REQUIREMENTS

3.6 OFFGAS TREATMENT SYSTEM

Applicability

Applies to the calculation of the radiation dose from gaseous effluents containing radioactive materials.

Objective

To ensure that treatment of gaseous wastes by the offgas system is implemented when required.

Specifications

- a. If the charcoal beds are not in service when the offgas treatment system is required, doses due to gaseous releases from the site shall be projected at least monthly in accordance with the ODCM.

LIMITING CONDITIONS FOR OPERATION

- b. The offgas charcoal beds shall be used, when offgas treatment system operation is required and the projected doses over a 31 day period due to gaseous effluent releases to a member of the public would exceed:
 - 1. 0.2 mrad for gamma radiation
 - 2. 0.4 mrad for beta radiation; or
 - 3. 0.3 mrem to any organ
- c. With gaseous effluent from the main condenser being discharged without use of the charcoal beds for greater than seven days when treatment is required, and projected doses are in excess of the above limits, prepare and submit to the Commission, within 30-days, a Special Report that includes the following information:
 - 1. Explanation of why gaseous effluent is being discharged without charcoal bed treatment, identification of any inoperable equipment or subsystems, and the reason for the inoperability,
 - 2. Action(s) taken to restore the inoperable equipment to operable status; and
 - 3. Summary description of action(s) taken to prevent a recurrence.

SURVEILLANCE REQUIREMENTS

LIMITING CONDITIONS FOR OPERATION

treatment system under the following conditions:

1. The offgas dilution steam flow instrumentation shall alarm and automatically isolate the offgas recombiner system at low flow less than 6000 pounds per hour or high flow greater than 7200 pounds per hour.
 2. The offgas recombiner inlet temperature sensor shall alarm and automatically isolate the offgas recombiner system at a temperature of not less than 125°C.
 3. The offgas recombiner outlet temperature shall alarm and automatically isolate the offgas treatment system at a temperature of not less than 150°C.
- c. In lieu of continuous hydrogen or oxygen monitoring, the condenser offgas treatment system recombiner effluent shall be analyzed to verify that it contains less than or equal to 4% hydrogen by volume.
- d. With the requirements of the above specifications not satisfied, restore the recombiner system to within operating specifications or suspend use of the charcoal treatment system within 48 hours.

SURVEILLANCE REQUIREMENTS

1. An instrument check shall be performed daily when the offgas treatment system is in operation.
2. An instrument channel functional test shall be performed once per operating cycle.
3. An instrument channel calibration shall be performed once per operating cycle.

- c. With condenser offgas treatment system recombiner in service, in lieu of continuous hydrogen or oxygen monitoring, the hydrogen content shall be verified weekly to be less than or equal to 4% by volume.

In the event that the hydrogen content cannot be verified, operation of this system may continue for up to 14 days.

TABLE 3.10-1
RADIATION MONITORING SYSTEMS THAT INITIATE AND/OR ISOLATE SYSTEMS

Minimum No. of Operable Instrument Channels	Trip Function	Trip Level Setting	Total Number of Instrument Channels Provided by Design	Action	
1(a)	Refuel Area Exhaust Monitor	(b)	2	(c) or (d)	
1(a)	Reactor Building Area Exhaust Monitors	(b)	2	(d)	
1(a)	SJAE Radiation Monitors	$\leq 500,000 \text{ } \mu\text{Ci/sec}$	2	(e)	
1(a)	Turbine Building Exhaust Monitors	(b)	2	(f)	
1(a)	Radwaste Building Exhaust Monitors	(b)	2	(f)	
1(a)	Main Control Room Ventilation	$\leq 4 \times 10^9 \text{ cpm}^{(i)}$	1	(g)	
(h)	Mechanical Vacuum Pump Isolation	$\leq 3 \times \text{Normal Full}$ Power Background	4	(h)	

NOTES FOR TABLE 3.10-1

- (a) Whenever the systems are required to be operable, there shall be one operable or tripped instrument channel per system. From and after the time it is found that this cannot be met, the indicated action shall be taken.
- (b) Trip level setting is in accordance with the methods and procedures of the ODCM.
- (c) Cease operation of the refueling equipment.
- (d) Isolate secondary containment and start the SBGTS.
- (e) Bring the SJAE release rate within the limit within 72 hours or be in hot standby within the next 12 hours.
- (f) Refer to Appendix B LCO 3.1.d.
- (g) Control room isolation is manually initiated.
- (h) Uses same sensors as primary containment isolation on high main steam line radiation. Refer to Appendix A Table 3.2-1 for minimum number of operable instrument channels and action required.
- (i) Conversion factor is $8.15 \times 10^7 \text{ cpm} - 1 \text{ } \mu\text{Ci/cc}$.

TABLE 3.10-2

MINIMUM TEST AND CALIBRATION FREQUENCY FOR RADIATION MONITORING SYSTEMS^(a)

Instrument Channels	Instrument Check ^(b)	Instrument Channel Functional Test ⁽¹⁾	Instrument Channel Calibration	Logic System Function Test ^{(f)(h)}
Main Stack Exhaust Monitors	Daily	Quarterly	Quarterly	--
Refuel Area Exhaust Monitors	Daily	Quarterly	Quarterly	--
Reactor Building Area Exhaust Monitors/Isolation	Daily	Quarterly	Quarterly	Semiannually
Turbine Building Exhaust Monitors	Daily	Quarterly	Quarterly	--
Radwaste Building Exhaust Monitors	Daily	Quarterly	Quarterly	--
SJAE Radiation Monitors/Offgas Line Isolation	Daily	Quarterly	Quarterly	Semiannually
Main Control Room Ventilation Monitor	Daily	Quarterly	Quarterly	--
Mechanical Vacuum Pump Isolation ^(g)	--	--	--	Once per Operating Cycle
Liquid Radwaste Discharge Monitor/Isolation ^{(c)(d)(e)(f)}	Daily When Discharging	Quarterly	Quarterly	Semiannually
Liquid Radwaste Discharge Flow Rate Measuring Devices ^(d)	Daily	Quarterly	Once per Operating Cycle	--
Liquid Radwaste Discharge Radioactivity Recorder ^(d)	Daily	Quarterly	Once per Operating Cycle	--
Normal Service Water Effluent ^(f)	Daily	Quarterly	Quarterly	--
SBGTS Actuation	--	--	--	Semiannually

NOTES TO FIGURE 5.1-1

- (a) NMP1 stack (height is 350 feet)
- (b) NMP2 stack (height is 430 feet)
- (c) JAFNPP stack (height is 385 feet)
- (d) Building vents
- (e) NMP1 radioactive liquid discharge (Lake Ontario, bottom)
- (f) NMP2 radioactive liquid discharge (Lake Ontario, bottom)
- (g) JAFNPP radioactive liquid discharge (Lake Ontario, bottom)
- (h) Site boundary
- (i) Lake Ontario shoreline

Additional Information:

- NMP2 reactor building vent is located 187 feet above ground level
- JAFNPP reactor and turbine building vents are located 173 feet above ground level
- JAFNPP radwaste building vent is 112 feet above ground level

TABLE 6.1-1 (continued)

Exposure Pathway and/or Sample	Number of Samples ^(a) and Locations	Sampling and Collection Frequency ^(a)	Type and Frequency of Analysis
Fish	<p>a. 1 sample of each of 2 commercially or recreationally important species in the vicinity of a site discharge point.</p> <p>b. 1 sample of each of 2 species (same as in a. above or of a species with similar feeding habits) from an area at least 5 miles distant from the site^(d).</p>	Twice per year.	Gamma isotopic ^(c) analysis of edible portions.
Food Products	<p>a. In lieu of the garden census as specified in 6.2, samples of at least 3 different kinds of broad leaf vegetation (such as vegetables) grown nearest each of two different offsite locations of highest predicted site average D/Q (Based on all licensed site Reactors).</p> <p>One (1) sample of each of the similar broad leaf vegetation grown at least 9.3 miles distant in a least prevalent wind direction sector^(d).</p>	Once during harvest season.	Gamma isotopic ^(c) analysis of edible portions. (Isotopic to include I-131.)

TABLE 6.1-2

REPORTING LEVEL FOR RADIOACTIVITY CONCENTRATIONS IN ENVIRONMENTAL SAMPLES
REPORTING LEVELS

Analysis	Water (pCi/l)	Airborne Particulate or Gases (pCi/m ³)	Fish (pCi/kg. wet)	Milk (pCi/l)	Food Products (pCi/kg. wet)
H-3	30,000				
Mn-54	1,000		30,000		
Fe-59	400		10,000		
Co-58	1,000		30,000		
Co-60	300		10,000		
Zn-65	300		20,000		
Zr/Nb-95	400				
I-131	20	0.9		3	100
Cs-134	30	10	1,000	60	1,000
Cs-137	50	20	2,000	70	2,000
Ba/La-140	200			300	

TABLE 6.1-3

DETECTION CAPABILITIES FOR ENVIRONMENTAL SAMPLE ANALYSIS(a)
LOWER LIMIT OF DETECTION (LLD)(b)

Analysis	Water (pCi/l)	Airborne Particulate or Gases (pCi/m ³)	Fish (pCi/kg, wet)	Milk (pCi/l)	Food Products (pCi/kg, wet)	Sediment (pCi/kg, dry)
gross beta	4	0.01				
H-3	3,000					
Mn-54	15		130			
Fe-59	30		260			
Co-58,60	15		130			
Zn-65	30		260			
Zr/Nb-95	15					
I-131	15 ^(c)	0.07		1	60	
Cs-134	15	0.05	130	15	60	150
Cs-137	18	0.06	150	18	80	180
Ba/La-140	15			15		

NOTES FOR TABLE 6.1-3

- (a) The LLD is the smallest concentration of radioactive material in a sample that will be detected with 95% probability and with 5% probability of falsely concluding that a blank observation represents a "real" signal.

For a particular measurement system (which may include radiochemical separation),

$$LLD = \frac{4.66 s_b}{E \cdot V \cdot 2.22 \cdot Y \cdot \exp(-\lambda \Delta t)}$$

Where:

LLD is the a priori lower limit of detection, as defined above (in picocurie per unit mass or volume);

s_b is the standard deviation of the background counting rate or of the counting rate of a blank sample, as appropriate (in counts per minute);

E is the counting efficiency (in counts per transformation);

V is the sample size (in units of mass or volume);

2.22 is the number of transformations per minute per picocurie;

Y is the fractional radiochemical yield (when applicable);

λ is the radioactive decay constant for the particular radionuclide;

Δt is the elapsed time between sample collection (or end of the sample collection period) and time of counting.

Typical values of E, V, Y, and Δt should be used in the calculations.

- (b) It should be recognized that the LLD is defined as an a priori (before the fact) limit representing the capability of a measurement system and not as an a posteriori (after the fact) limit for a particular measurement. Analyses shall be performed in such a manner that the stated LLDs will be achieved under routine conditions. Occasionally background fluctuations, unavoidable small sample sizes, the presence of interfering nuclides, or other uncontrollable circumstances may render these LLDs unachievable. In such cases, the contributing factors shall be identified and described in the Annual Radiological Environmental Operating Report.
- (c) No drinking water pathway exists at the Nine Mile Point Site under normal operating conditions due to the direction and distance of the nearest drinking water intake. Therefore, an LLD value of 15 pCi/liter is used.

7. The Radioactive Effluent Release Report shall contain the cause for unavailability of any environmental sample required by Table 6.1.1 and shall identify the locations for obtaining replacement samples. This shall also include a revised figure(s) and table for the ODCM reflecting the new location(s). Refer to Specification 6.1.c.
8. The Radioactive Effluent Release Report shall contain new locations identified in the land use census in accordance with Specifications 6.2.b or 6.2.c.
9. The Radioactive Effluent Release Report shall contain the events leading to the condition which resulted in exceeding 10 curies for tanks specified in the Limiting Conditions for Operation, Section 2.5.a.

d. Annual Radiological Environmental Operating Report

Routine Radiological Environmental Reports covering the operation of the unit during the previous calendar year shall be submitted prior to May 1 of each year.

The Annual Radiological Environmental Operating Reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period. The report shall include a comparison with preoperational studies, operational controls (as appropriate), and environmental surveillance reports from the previous five years, and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of the Land Use Census required by Specification 6.2

The Annual Radiological Environmental Operating Reports shall include the results of analysis of all radiological environmental samples and of all measurements taken during the period pursuant to Table 6.1-1, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion in the report, the report shall note and explain the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

The reports shall also include the following: A summary description of the Radiological Environmental Monitoring Program; at least two legible maps* covering all sampling locations and keyed to a table giving distances and directions from the centerline of one reactor; the results of participation in the Interlaboratory Comparison Program required by Specification 6.3 (or appropriate EPA cross-check program code), and discussion of all analyses in which the LLD's required by Table 6.1-3 were not routinely achievable.

* One map shall cover stations near the site boundary; a second shall include the more distant stations.

C. Revisions of the ODCM:

1. shall be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the revisions were made effective. This submittal shall contain:
 - a. sufficiently detailed information to support the rationale for the revisions without benefit of additional information (information submitted shall consist of revised pages of the ODCM, with each page numbered and provided with an approval and date box, together with appropriate evaluations justifying the revisions);
 - b. a determination that the revisions will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and
 - c. documentation that the revisions have been reviewed and found acceptable by the PORC.
2. shall become effective upon issue following review and acceptance by the PORC.

6.18 MAJOR MODIFICATIONS TO RADIOACTIVE LIQUID, GASEOUS AND SOLID WASTE TREATMENT SYSTEMS*

- A. Major modifications to radioactive waste systems (liquid, gaseous and solid):
1. shall be reported to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the modification is completed and made operational. The discussion of each modification shall contain:
 - a. a summary of the evaluation that led to the determination that the modification could be made in accordance with 10 CFR 50.59;
 - b. sufficient information to support the reason for the modification without benefit of additional or supplemental information; and
 - c. a description of the equipment, components and processes involved and the interfaces with other plant systems.

*The Authority may elect to submit the information called for in this Specification as part of the annual 10 CFR 50.59 Safety Evaluation Report.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 127 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

INTRODUCTION

By letter dated May 19, 1988, the Power Authority of the State of New York (PASNY or the licensee) requested changes to the Technical Specifications (TS) - Appendix A of the Facility Operating License - and to the Radiological Environmental Technical Specifications (RETS) - Appendix B of the Facility Operating License - for the FitzPatrick Nuclear Power Plant.

DESCRIPTION

The proposed RETS portion of the amendment would: (1) modify Note (b) to Table 2.2-1 by changing the analysis required if the monitors do not meet operability requirements from a gross radioactivity (beta or gamma) to a principal gamma emitter analysis since gamma emitters are analyzed using gamma spectroscopy which is more reliable and accurate; (2) add Iodine-133 to Table 3.2-1 for the type of activity analysis included in the radioactive gaseous waste sampling and analysis program for consistency with the program for determining the gaseous dose rates of Section 3.2 and the Offsite Dose Calculation Manual (ODCM); (3) reformat and combine some Table 3.2-1 notes for clarity and consistency; (4) change the noble gas sample location designated in Surveillance 3.5.1. from the Steam Jet Air Ejector discharge (only) to either the Steam Jet Air Ejector discharge or the offgas recombiner discharge (prior to delay of the offgas) in order to obtain a more representative sample of gross radioactivity release rate during offgas recombiner operation; (5) add new LCOs and corresponding surveillance requirements to Specification 3.6 to address charcoal bed bypass capability (rather than bypass of the offgas treatment system) and required actions per the ODCM since it is the charcoal beds which specifically treat the offgas; (6) modify LCO Specifications 3.7.b.2. and 3.7.b.3. concerning isolation of the offgas system dealing with the offgas recombiner inlet and outlet temperature sensor instrumentation limits for clarity; (7) modify Surveillance Requirement 3.7.c. so that it more closely reflects its corresponding LCO by specifying the recombiner effluent rather than the recombiner for the sample location; (8) modify Table 3.10-1 to show that Footnote (a) only applies to the first six trip functions listed in the table and to show that the requirement for operability in Footnote (a) is

concerned with one operable or tripped instrument channel per system; (9) delete Note (1) from the calibration column of Table 3.10-2 since the test only applies to instrument channel functional testing. The proposed amendment would also change the instrument channel calibration frequency for the turbine and radwaste building radiation exhaust monitors from semiannual to quarterly for consistency with similar tests; (10) correct an error by deleting the words "ground level" and corresponding footnote from Note (d) to Figure 5.1-1 since the actual evaluation of the vents is taken into account in the offsite dose calculations method in the ODCM; (11) delete the contents found under the Food Products subheading (Items a. and b. of Table 6.1-1) since it provides an unnecessary alternative for milk sampling. Milk sampling has been and will continue to be, performed in conjunction with similar programs at Nine Mile Point (NMP) Units 1 and 2; (12) change the reporting levels of 2 and 1 pCi/liter for Iodine-131 in water samples in Tables 6.1-2 and 6.1-3, respectively, to 20 and 15 pCi/liter, respectively, for consistency with recent NRC criteria and NMP site RETS, since the direction and distance to the nearest water intake means that the plant does not have a drinking water pathway under normal operating conditions; (13) change Specification 7.3.d. to show that the reactor centerline used for determining sample locations listed in the Annual Environmental Operating Report can be either the NMP Unit 2 or the FitzPatrick reactor centerlines. This will allow continued use of the NMP Unit 2 reactor centerline to determine sample locations, which is consistent with NRC guidance for sites with joint environmental programs.

The proposed change to the TS (Appendix A to the Operating License) Specification 6.18, would eliminate the annual FSAR update as an alternative method for reporting major modifications to the radioactive waste systems. This requirement will be furnished in either the semiannual report or the annual 10 CFR 50.59 Safety Evaluation Report, as specified in this TS Section.

EVALUATION

The proposed changes to the RETS, Appendix B, and Technical Specifications, Appendix A, will not impact plant safety or operation. All of the changes are administrative or editorial in nature. There are no setpoint changes regarding isolation or alarms. The proposed changes do not involve safety limit changes. These changes clarify or correct errors as currently written in the specifications. The proposed changes are designed to improve and facilitate the use of RETS. These changes will help the plant operators by achieving consistency and reducing the necessity for interpretation of RETS.

The proposed change on page 5 to the current Note (b) does not impact plant operations, since it clarifies grab sample analysis for radionuclides.

The proposed change related to additional specification and reporting requirements, Specification 3.6, does not impact plant operation, since it clarifies the charcoal beds operability when bypassed. Projected cumulative doses that could result from bypassing the charcoal beds, will now be monitored.

The addition of Iodine-133 proposed to Table 3.2-1 on page 21, and the rearrangement of the table footnotes on page 23, are needed to achieve consistency throughout RETS. These proposed changes, therefore, are administrative in nature and do not impact facility operation.

The proposed change related to the sampling location for gross radioactivity release rate of noble gases, Surveillance Requirement 3.5.a, provides an alternative location for better sampling. The current specification is too restrictive when sampling during different modes of offgas recombiner operations. This change will not affect plant operation.

The proposed changes to pages 56, 58, 59, 60, and 68 do not impact facility operation. They are administrative in nature and consistent with the Nine Mile Point RETS.

The proposed change in Appendix A, on page 258c, eliminates the FSAR as an alternative for reporting major modifications to radioactive waste systems. This change does not impact facility operation, since the reporting requirements will be included in either the semiannual radioactive effluent release report or the annual 10 CFR 50.59 safety evaluation report.

The proposed changes to RETS, Appendix B, and the Technical Specifications, Appendix A, do not change any system or subsystem and will not alter the conclusions of either the FSAR or SER accident analysis. They are, therefore, found to be acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 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 this amendment.

CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: May 9, 1989

PRINCIPAL CONTRIBUTOR:

D. LaBarge