

December 17, 1986

DCR 016

Dockets Nos. 50-269, 50-270
and 50-287

Distribution	WJones
Docket File	FOB, PWR-B
NRC & LPDRs	LFMB
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OPA	TBarnhart-12
LHarmon	JPartlow
ACRS-10	BGrimes
GEdison	SWest

Mr. Hal B. Tucker
Vice President - Nuclear Production
Duke Power Company
P. O. Box 33189
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

The Commission has issued the enclosed Amendments Nos. 152, 152, and 149 to Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55 for the Oconee Nuclear Station, Units Nos. 1, 2 and 3. These amendments consist of changes to the Station's common Technical Specifications (TSs) in response to your request dated August 27, as supplemented on September 29, 1986.

These amendments revise the TSs to add operability requirements of monitors and surveillance items required by the addition of the radwaste facility at Oconee Nuclear Station. The amendments also delete certain outdated footnotes with the gaseous process and effluent monitoring instrumentation.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance of the enclosed amendments will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/s/

Helen N. Pastis, Project Manager
PWR Project Directorate #6
Division of PWR Licensing-B

Enclosures:

1. Amendment No. 152 to DPR-38
2. Amendment No. 152 to DPR-47
3. Amendment No. 149 to DPR-55
4. Safety Evaluation

cc w/enclosures:
See next page

PBD-6 *vi*
RIgram
11/24/86

PBD-6 *vi*
HPastis:
11/24/86

PBD-6 *vi*
SWest
11/24/86

PBD-6 *vi*
CMcCracken
11/25/86

PBD#6 *vi*
GEdison
11/25/86

PBD-6 *vi*
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Mr. H. B. Tucker
Duke Power Company

Oconee Nuclear Station
Units Nos. 1, 2 and 3

cc:

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Honorable James M. Phinney
County Supervisor of Oconee County
Walhalla, South Carolina 29621



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

DUKE POWER COMPANY

DOCKET NO. 50-269

OCONEE NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 152
License No. DPR-38

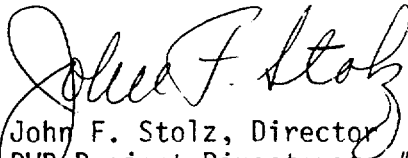
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duke Power Company (the licensee) dated August 27, 1986, as supplemented on September 29, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), 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 3.B of Facility Operating License No. DPR-38 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 152, 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.

FOR THE NUCLEAR REGULATORY COMMISSION


John F. Stolz, Director
PWR Project Directorate #6
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 17, 1986



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

DUKE POWER COMPANY

DOCKET NO. 50-270

OCONEE NUCLEAR STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 152
License No. DPR-47

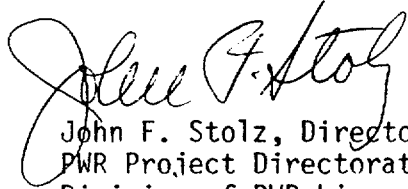
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duke Power Company (the licensee) dated August 27, 1986, as supplemented on September 29, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), 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 3.B of Facility Operating License No. DPR-47 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 152, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in dark ink, appearing to read "John F. Stolz", is written over the typed name and title.

John F. Stolz, Director
PWR Project Directorate #6
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 17, 1986



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

DUKE POWER COMPANY

DOCKET NO. 50-287

OCONEE NUCLEAR STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 149
License No. DPR-55

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duke Power Company (the licensee) dated August 27, 1986, as supplemented on September 29, 1986, 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 3.B of Facility Operating License No. DPR-55 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 149, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in dark ink, appearing to read "John F. Stolz", is written over the typed name and title.

John F. Stolz, Director
PWR Project Directorate #6
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 17, 1986

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 152 TO DPR-38

AMENDMENT NO. 152 TO DPR-47

AMENDMENT NO. 149 TO DPR-55

DOCKETS NOS. 50-269, 50-270 AND 50-287

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment numbers and contain vertical lines indicating the area of change.

Remove Pages

3.5-41
3.5-42
4.1-11

4.1-17

Insert Pages

3.5-41
3.5-42
4.1-11
4.1-12a
4.1-17

Table 3.5.5-2
GASEOUS PROCESS AND EFFLUENT
MONITORING INSTRUMENTATION
OPERATING CONDITIONS

<u>INSTRUMENT</u>	A MINIMUM OPERABLE CHANNELS (PER RELEASE PATH)	<u>APPLICABILITY</u>	B OPERATOR ACTION IF MINIMUM NUMBER OF OPERABLE CHANNELS IS NOT MET
1. Waste Gas Holdup Tanks			
a. Noble Gas Activity Monitor - Providing Alarm and Automatic Termination Of Release (RIA-37, - 38)	1	**	(a)
b. Effluent Flow Rate Monitor (Waste Gas Discharge Flow)	1	**	(b)
2. Unit Vent Monitoring System			
a. Noble Gas Activity Monitor Providing Alarm and Automatic Termination of Con- tainment Purge Re- lease (RIA - 45)	1	*	(a)
b. Iodine Sampler	1	*	(d)
c. Particulate Sampler	1	*	(d)
d. Effluent Flow Rate Monitor (Unit Vent Flow)	1	*	(b)
e. Sampler Flow Rate Monitor	1	*	(e)
f. Effluent Flow Rate Monitor (Containment Purge)	1	**	(b)
3. Interim Radwaste Building Ventilation Monitoring System			
a. Noble Gas Activity Monitor (RIA - 53)	1	*	(c)
b. Iodine Sampler	1	*	(d)
c. Particulate Sampler	1	*	(d)

Table 3.5.5-2 (Cont'd)
GASEOUS PROCESS AND EFFLUENT
MONITORING INSTRUMENTATION
OPERATING CONDITIONS

<u>INSTRUMENT</u>	A MINIMUM OPERABLE CHANNELS (PER RELEASE PATH)	<u>APPLICABILITY</u>	B OPERATOR ACTION IF MINIMUM NUMBER OF OPERABLE CHANNELS IS NOT MET
d. Effluent Flow Rate Monitor (Interim Radwaste Exhaust)	1	*	(b)
e. Sampler Flow Rate Monitor	1	*	(e)
4. Hot Machine Shop Ventilation Monitoring System			
a. Iodine Sampler	1	*	(d)
b. Particulate Sampler	1	*	(d)
c. Effluent Flow Rate Monitor (Hot Machine Shop Exhaust)	1	*	(b)
d. Sampler Flow Rate Monitor	1	*	(e)
5. Radwaste Facility Ventilation Monitoring System			
a. Noble Gas Activity Monitor (4 RIA-45)#	1	*	(c)
b. Iodine Sampler#	1	*	(d)
c. Particulate Sampler#	1	*	(d)
d. Effluent Flow Rate Monitor (Radwaste Facility Exhaust)#	1	*	(b)
e. Sampler Flow Rate Monitor#	1	*	(e)

* At all times.

** During waste gas holdup tank releases and/or containment purge operation.

Effective upon initial employment of Radwaste Facility for radwaste processing.

TABLE 4.1-3 Continued

Minimum Sampling Frequency And Analysis Program

<u>Item</u>	<u>Check</u>	<u>Frequency</u>	<u>Lower Limit of Detection⁽⁵⁾ of Lab Analysis for Waste</u>
7. Condensate Test Tank, Condensate Monitoring Tank, Laundry-Hot Shower Tank, Waste and Recycle Monitor Tanks	a. Principal Gamma Emitters ⁽⁶⁾ including Dissolved Noble Gases	a. Composite Grab Sample prior to release of each batch ⁽¹¹⁾	a. Ce-144 and Mo-99 $<5 \times 10^{-6}$ $\mu\text{Ci/ml}$ Other Gamma Nuclides $<5 \times 10^{-7}$ $\mu\text{Ci/ml}$ Dissolved Gases $<10^{-5}$ $\mu\text{Ci/ml}$ I-131 $<10^{-6}$ $\mu\text{Ci/ml}$
	b. Radiochemical Analysis Sr 89, 90, Fe-55	b. Quarterly from all ⁽⁹⁾ composited batches	b. $<5 \times 10^{-8}$ $\mu\text{Ci/ml}$ for Sr's $<10^{-6}$ $\mu\text{Ci/ml}$ for Fe-55
	c. Tritium	c. Monthly Composite	c. $<10^{-5}$ $\mu\text{Ci/ml}$
	d. Gross Alpha Activity	d. Monthly Composite	d. $<10^{-7}$ $\mu\text{Ci/ml}$
8. Unit Vent Sampling (Includes Waste Gas Decay Tanks, Reactor Building Purges, Auxiliary Building Ventilation, Spent Fuel Pool Ventilation, Air Ejectors)	a. Iodine Spectrum ⁽⁴⁾	a. Continuous monitor, weekly sample ⁽⁸⁾	a. $<10^{-10}$ $\mu\text{Ci/cc}$ (I-133) $<10^{-12}$ $\mu\text{Ci/cc}$ (I-131)
	b. Particulates ⁽⁴⁾	b.	b.
	(1) Ce-144 and Mo-99	(1) Weekly Composite ⁽⁸⁾	(1) $<5 \times 10^{-9}$ $\mu\text{Ci/cc}$
	(2) Other Principal Gamma Emitters ⁽⁷⁾	(2) Weekly Composite ⁽⁸⁾	(2) $<10^{-10}$ $\mu\text{Ci/cc}$
	(3) Gross Alpha Activity	(3) Monthly, using composite samples of one week	(3) $<10^{-11}$ $\mu\text{Ci/cc}$
	(4) Radiochemical Analysis Sr 89, 90	(4) Quarterly Composite	(4) $<10^{-11}$ $\mu\text{Ci/cc}$
	c. Cases by Principal Gamma ⁽⁷⁾ Emitters	c. Weekly Grab Sample	c. $<10^{-4}$ $\mu\text{Ci/cc}$
	d. Tritium	d. Weekly Grab Sample	d. $<10^{-6}$ $\mu\text{Ci/cc}$

TABLE 4.1-3 Continued

Minimum Sampling Frequency And Analysis Program

<u>Item</u>	<u>Check</u>	<u>Frequency</u>	<u>Lower Limit of Detection⁽⁵⁾ of Lab Analysis for Waste</u>
14. Radwaste Facility Ventilation	a. Iodine Spectrum ⁽⁴⁾	a. Continuous monitor, weekly sample ⁽⁸⁾	a. $<10^{-9}$ $\mu\text{Ci/cc}$ (1-133) $<10^{-11}$ $\mu\text{Ci/cc}$ (1-131)
	b. Particulates ⁽⁴⁾	b.	b.
	(1) Ce-144 and Mo-99	(1) Weekly Composite ⁽⁸⁾	(1) $<5 \times 10^{-9}$ $\mu\text{Ci/cc}$
	(2) Other Principal Gamma Emitters ⁽⁷⁾	(2) Weekly Composite ⁽⁸⁾	(2) $<10^{-10}$ $\mu\text{Ci/cc}$
	(3) Gross Alpha Activity	(3) Monthly, using composite samples of one week	(3) $<10^{-11}$ $\mu\text{Ci/cc}$
	(4) Radiochemical Analysis Sr 89, 90	(4) Quarterly Composite	(4) $<10^{-11}$ $\mu\text{Ci/cc}$
	c. Cases by Principal Gamma ⁽⁷⁾ Emitters	c. Weekly Grab Sample	c. $<10^{-4}$ $\mu\text{Ci/cc}$
	d. Tritium	d. Weekly Grab Sample	d. $<10^{-6}$ $\mu\text{Ci/cc}$

TABLE 4.1-4 (Continued)

RADIOACTIVE EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL RESPONSE CHECK (4)</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
7. Interim Radwaste Building Ventilation Monitoring				QU(2)
a. Noble Gas Activity Monitor (RIA-53)	DA	MO	AN(3)	NA
b. Iodine Sampler	DA	NA	NA	NA
c. Particulate Sampler	DA	NA	NA	NA
d. Effluent Flow Rate Monitor (Interim Radwaste Exhaust)	DA	NA	AN	NA
e. Minimum Flow Device	DA	NA	AN	NA
8. Hot Machine Shop	DA	NA	NA	NA
a. Iodine Sampler	DA	NA	NA	NA
b. Particulate Sampler				
c. Effluent Flow Rate Monitor (Hot Machine Shop Exhaust)	DA	NA	AN	NA
d. Minimum Flow Device	DA	NA	AN	NA
9. Radwaste Facility Ventilation Monitoring				QU(2)
a. Noble Gas Activity Monitor (4RIA-45)#	DA	MO	AN(3)	NA
b. Iodine Sampler#	DA	NA	NA	NA
c. Particulate Sampler#	DA	NA	NA	NA
d. Effluent Flow Rate Monitor (Radwaste Facility-Exhaust)#	DA	NA	AN	NA
e. Minimum Flow Device#	DA	NA	AN	NA

*During each release via this pathway.

#Effective upon initial employment of Radwaste Facility for radwaste processing.

Frequency NotationDA - Daily
QU - QuarterlyMO - Monthly
AN - AnnuallyPR - Completed prior to each release
NA - Not Applicable



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 152 TO FACILITY OPERATING LICENSE NO. DPR-38

AMENDMENT NO. 152 TO FACILITY OPERATING LICENSE NO. DPR-47

AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-55

DUKE POWER COMPANY

OCONEE NUCLEAR STATION, UNITS NOS. 1, 2 AND 3

DOCKETS NOS. 50-269, 50-270 AND 50-287

1.0 INTRODUCTION

By letter dated August 27, 1986, as supplemented on September 29, 1986, Duke Power Company (the licensee) proposed changes to the Technical Specifications (TSs) of Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55 for the Oconee Nuclear Station, Units Nos. 1, 2 and 3. These amendments would consist of changes to the Station's common TSs and would add operability requirements of monitors and surveillance items required by the addition of the radwaste facility at the Oconee Nuclear Station. The amendments would also delete certain outdated footnotes with the gaseous process and effluent monitoring instrumentation.

2.0 BACKGROUND

In a letter dated June 10, 1985, the licensee requested approval, pursuant to 10 CFR Part 20, Sections 20.302 and 20.305, to operate a low-level radioactive waste incinerator at the Oconee Nuclear Station. The incinerator is one component in the radwaste facility. In this letter, the licensee stated that the safety evaluation of the modifications of the design, construction and operation of other plant systems and components related to the use of this facility were handled by the licensee under the auspices of 10 CFR 50.59.

The NRC staff reviewed this information and concluded that the operation of the incinerator will not present an undue hazard to either the safe operation of the Oconee Nuclear Station or the public health and safety. However, the NRC staff requested TS changes incorporating limiting conditions for operation and surveillance requirements for the radiation monitors covering the releases of radioactive materials in airborne effluents from the incinerator to ensure adequate control of releases from the system before the system may be actually operated. The staff published in the FEDERAL REGISTER its "Environmental Assessment and Finding of No Significant Impact" for the low-level radioactive waste incinerator (51 FR 39719). In a letter dated October 30, 1986, the staff sent a letter and its Safety Evaluation to the licensee approving the design of the incinerator.

3.0 DESCRIPTION OF THE MONITORS

The exhaust gas radiation monitor (4 RIA-45) for the radwaste facility measures effluent exhaust from all potentially contaminated areas of the facility, i.e., from the radwaste facility ventilation system, tank vents and the volume reduction subsystem off-gas exhaust (incinerator).

Air is drawn from the exhaust duct near the release point by the isokinetic flow sampling device into the sample inlet line of the monitor. Air enters first a particulate/iodine filter. Particulates are retained on filter media and iodine molecules are collected in the charcoal cartridge. After passing through the particulate and iodine collector, the air flow goes to the noble gas monitor. The activity of the gases are monitored by a beta scintillation detector and a GM detector. The air then passes through the flow control device, the pump, and exits the sample line via the sample outlet into the exhaust duct.

4.0 EVALUATION

The proposed amendments to the Oconee Nuclear Station Technical Specifications limiting conditions for operation and surveillances add requirements for gaseous effluent monitoring instrumentation for the radwaste facility ventilation monitoring system and a minimum sampling frequency and analysis program for effluents from this pathway. These added requirements for this new effluent release pathway are similar to existing requirements for the other effluent release pathways at the Oconee Nuclear Station. All of the effluent monitoring instrumentation and sampling and analysis requirements conform to the provisions of NUREG-0472, "Standard Radiological Effluent Technical Specifications for Pressurized Water Reactors". As stated in NUREG-0472 and in the Bases for the Oconee Nuclear Station Technical Specifications for Radioactive Effluent Monitoring Instrumentation, the operability and use of this instrumentation satisfy the requirements of General Design Criteria (GDC) 60, "Control of Releases of Radioactive Materials to the Environment", GDC 63, "Monitoring Fuel and Waste Storage", and GDC 64, "Monitoring Radioactivity Releases", of Appendix A to 10 CFR Part 50.

Additional changes were also proposed to Tables 3.5.5-2, 4.1-3, and 4.1-4 for clarification and minor administrative purposes. These are not technical in nature and are, therefore, acceptable.

5.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and in surveillance requirements. We have determined that the amendments involve 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 these amendments involve no significant hazards consideration and there has been no public comment on such

finding. Accordingly, these amendments meet 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 these amendments.

6.0 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: December 17, 1986

Principal Contributor: C. Nichols