

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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 50-270 Oconee Nuclear Station, Unit 2, Duke Power Co. 05000270
 50-287 Oconee Nuclear Station, Unit 3, Duke Power Co. 05000287

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 DENTON, H. R. Office of Nuclear Reactor Regulation, Director
 STOLZ, J. F. Operating Reactors Branch 4

SUBJECT: Forwards revised response to NRC 850906 request for addl info re incinerator license submittal. Response addresses Request A-8 re VR sys offgas subsystem.

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INTERNAL:	ACRS	09	6	6	ADM/LFMB		1 0
	ELD/HDS4		1	0	NRR/DE/MTEB		1 1
	NRR/DL DIR		1	1	NRR/DL/ORAB		1 0
	NRR/DL/TSRG		1	1	NRR/DSI/METB		1 1
	NRR/DSI/RAB		1	1	<u>REG FILE</u>	04	1 1
	RGN2		1	1			
EXTERNAL:	24X		1	1	EG&G BRUSKE,S		1 1
	LPDR	03	1	1	NRC PDR	02	1 1
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NOTES:			1	1			

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October 25, 1985

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. J. F. Stolz, Chief
Operating Reactors Branch No. 4

Subject: Oconee Nuclear Station
Docket Nos. 50-269, -270, -287

Dear Sir:

By a letter dated September 6, 1985, the NRC requested additional information concerning Duke Power's Incinerator License submittal for Oconee Nuclear Station. By a letter dated October 9, 1985, Duke responded to this request.

Please find attached a revision to Duke's response to request A-8. This revision should replace the original response in its entirety.

Very truly yours,

H.B. Tucker / BT
Hal B. Tucker

SGG:slb

Attachment

cc: Dr. J. Nelson Grace, Regional Administrator
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Request 8:

Describe how the VR system off-gas subsystem is constructed and will be operated, maintained, and tested, in accordance with the intent of Regulatory Guide 1.140.

Response:

The VR system off-gas subsystem is constructed and operated as described in the AECC Topical 3 except as noted in the license submittal. The portion of the system relevant to Request #8 is the off-gas filter train. The filters will be operated and tested according to the following plan:

1. Perform an initial acceptance test of the system by:
 - a. In-place leak testing both HEPA banks simultaneously by treating the two banks as one, and by assuming airflow distribution and air-aerosol mixing are acceptable.
 - b. In-place leak testing the 6" carbon bed, assuming airflow distribution and R-11 mixing are acceptable.
2. Perform periodic testing of the system by:
 - a. Taking samples of the used carbon when changing the filters and testing the carbon for radioiodine removal efficiencies.
 - b. Monitor pressure across the filter system on a daily basis.
 - c. Using the data from a and b above to determine filter replacement frequency required.
3. Review the daily releases as shown by the radwaste vent stack monitor to assure that the exhaust gas filter system removal of radioactive contaminants is within acceptable limits.

If the exhaust gas filter system is monitored in the above manner, it will provide adequate assurance that the system is performing its function of limiting radioactive releases below Tech. Spec. limits. Since this system is challenged daily by normal exhaust gas flow, the exhaust monitor provides a daily test of the filter system's ability to remove contaminants.

The exhaust gas filters are not designed to allow testing in accordance with the guidelines or intent of Regulatory Guide 1.140. It follows that the filter system is not testable to ANSI N510-1975 as referenced by Regulatory Guide 1.140. The main obstacles to such in-place testing are as follows:

1. The filter system is a positive pressure (12 psig) system which makes the injection of challenge agents for leak test very difficult.
2. ANSI N509-1976 states in Section 1.1 that N509-1976 applies only to systems with ambient temperature adsorption. The subject system is designed for a gas stream temperature 210°F.
3. The system was not designed in accordance with the requirements of ANSI N509-1976:
 - a. Section 4.11 Testability
 - b. Section 5.6.1 Access Requirement
 - c. Section 5.6.1 Flow Uniformity
4. The system is not testable to the requirements of ANSI N510-1975:
 - a. Section 5.1 Visual Inspection
 - b. Section 8 Airflow Distribution
 - c. Section 9 Air-Aerosol Mixing Uniformity

5. In-place leak test requirements of the HEPA filters and carbon adsorber cannot be met because sections 8 and 9 of ANSI N510-1975 are prerequisites for leak test in Section 10 and 12 (Note 4 above).