

REGATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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 FACIL: 50-261 H. B. ROBINSON PLANT, UNIT 2, CAROLINA POWER AND LIGHT 05000261
 AUTH. NAME: UTLEY, E. E. AUTHOR AFFILIATION: CAROLINA POWER & LIGHT CO.
 RECIP. NAME: SCHWENCER, A. RECIPIENT AFFILIATION: OPERATING REACTORS BRANCH 1

SUBJECT: FORWARDS PROPOSED TECH SPECS FOR CONTROL ROOM FILTERS WHICH
 WERE REQUESTED BY STAFF & WILL BE PART OF 2300 MWT UPDATING
 AMEND TO LICENSE DPR-23.

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Carolina Power & Light Company

March 15, 1979

FILE: NG-3514(R)

SERIAL: GD-79-695

Office of Nuclear Reactor Regulation
ATTENTION: Mr. Albert Schwencer, Chief
Operating Reactors Branch No. 1
United States Nuclear Regulatory Commission
Washington, D. C. 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
LICENSE AMENDMENT FOR CONTROL ROOM FILTERS

Dear Mr. Schwencer:

In accordance with the Code of Federal Regulations, Title 10, Part 50.90 and Part 2.101 and as requested by your staff, proposed Technical Specifications for the H. B. Robinson Plant Unit No. 2 Control Room filters are attached.

The requirement for this license amendment originated with your staff's review of the proposed uprating of the H. B. Robinson core. It is, therefore, Carolina Power & Light Company's understanding that this license amendment will only be issued as an integral part of the amendment which uprates the H. B. Robinson core to 2300 MWt.

As discussed in our April 14, 1978, letter on this subject, since these specifications were requested by your staff and will be a part of the 2300 MWt uprating amendment, it is our understanding that no amendment fee is required.

In addition, as requested by your staff, Carolina Power & Light Company will provide the NRC a copy of the Startup Physics Report following the initial startup to 2300 MWt.

If you have any questions on this subject, please contact our staff.

Yours very truly,

Franklin Murray
for E. E. Utley
Senior Vice President
Power Supply

JJS/mf
Attachment

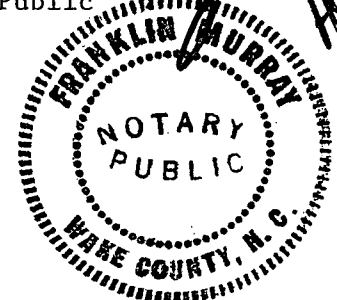
Sworn to and subscribed before me this 15th day of March, 1979.

Franklin Murray
Notary Public

My Commission Expires: October 4, 1981

7903200409

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3.15 CONTROL ROOM FILTER SYSTEM

Applicability

Applies to the Control Room filter system which is required for the safe operation of the plant. This system incorporates both HEPA filters and a charcoal adsorber bank.

Objective

To provide limiting conditions for operation which ensure the operability of the filter system during plant operation, such that normal operation or accidental plant conditions requiring operation of the system will not result in consequences more severe than those previously analyzed.

Specification

- 3.15.1 During all modes of operation, except cold shutdown, the Control Room filter system shall be capable of performing its intended function in the required manner, except as described below:
- a. If the system is determined to be inoperable, it shall be returned to operable status within seven days, or in lieu of any other report, prepare a Special Report which shall be submitted to the Commission within the next 14 days. This report shall outline the cause of the inoperability, the corrective actions taken, and the plans and schedule for restoring the system to an operable status.
- 3.15.2 If the system is determined to be inoperable while the reactor is in cold shutdown, the system shall be made operable prior to reactor startup.

Basis

Operability of the Control Room filter system ensures that the Control Room will remain habitable during an accidental atmospheric radiation

release to the extent that none of the occupants would receive a personnel radiation exposure in excess of 10 percent of the suggested limits in 10CFR100⁽¹⁾. Because the system's protection is required only during low probability events, the system may be out of service for 7 days for repairs. Following this period, a Special Report detailing the status of the system will be submitted to the Commission. Since reactor startup should not commence without this system in service, the specification prohibits startup with the system inoperable.

(1) FSAR Section 7.7.1

4.15 CONTROL ROOM FILTER SYSTEM

Applicability

Applies to the fan, associated charcoal adsorber bank, and HEPA filters of the Control Room filter system.

Objective

To verify that the Control Room filter system will adequately remove radioactivity from the incoming ambient air should there be an accidental radiation release to the atmosphere.

Specification

- 4.15.1 At least once per operating cycle or after 720 hours of system operation, whichever comes first, and (1) after structural modifications on the HEPA filter or charcoal adsorber housing which would adversely affect the air flow distribution and (2) following significant painting, fire, or chemical release in any ventilation zone communicating with the system, the following tests shall be performed:
- a. Verify that the system flow rate is equal to the design flow rate ± 10 percent.
 - b. Verify that the charcoal adsorbers remove ≥ 99 percent of a halogenated hydrocarbon refrigerant test gas when they are tested in-place while the ventilation system is operating at a flow equal to the design flow ± 10 percent.
 - c. Verify that the HEPA filter banks remove ≥ 99 percent of the DOP when they are tested in-place in accordance with ANSI N101.1 (1972) while operating the ventilation system at a flow equal to the design flow ± 10 percent.

d. Verify by way of a laboratory test that the system's carbon demonstrates a methyl iodine removal efficiency of ≥ 90 percent. The test shall be conducted in accordance with ANSI N509-1976, Table 5-1, Test 5b. The required carbon samples may be obtained by the following methods:

1. One sample obtained from a test canister designed to ANSI N509-1976. The sample must be at least two inches in diameter and with a length equal to or greater than the thickness of the cell's adsorber bed.
2. Two samples obtained by emptying an adsorber cell and mixing the carbon thoroughly. The samples must be at least two inches in diameter and with a length equal to or greater than the thickness of the cell's adsorber bed.

4.15.2 At least once per operating cycle, the following test shall be performed:

- a. Verify that the pressure drop across the combined HEPA filters and charcoal adsorber bank is < 6 inches Water Gauge at system design flow rate ± 10 percent.

4.15.3 After each complete or partial replacement of the carbon adsorber bank, perform the tests under Specification 4.15.1b.

4.15.4 After each complete or partial replacement of the HEPA filter bank, perform the tests under Specification 4.15.1c.

4.15.5 The associated fan unit in the Control Room filter system shall be verified operable monthly.

Basis

Determination that the system is operating at design flow \pm 10 percent indicates that the fan is operating at or near the design point on its operating curve. Operation of the fan at flows significantly different from the design flow will change the removal efficiency of the HEPA filters and carbon adsorbers.

The frequency of in-place testing and sample analysis are necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated under postulated accident conditions. Any HEPA filters found defective shall be replaced with the filters qualified pursuant to Regulatory Position C.3.d of NRC Regulatory Guide 1.52. If the carbon fails to pass the laboratory test, all adsorbent in the system shall be replaced with an adsorber qualified according to Table 5.1 of ANSI N509-1976.

If significant painting, fire, or chemical release occurs such that the HEPA filters or carbon adsorbers could become contaminated from the fumes, chemicals, or foreign material, the same in-place testing and sample analysis shall be performed as required for operational use. The determination of whether the incident is significant enough to warrant the testing shall be made by the Shift Foreman on duty. Knowledgeable staff members should be consulted prior to making this determination.

A pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate \pm 10 percent will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter.