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August 17, 1984

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

Attention: Ms. E. G. Adensam, Chief
Licensing Branch No. 4

Re: Catawba Nuclear Station, Unit 1
Docket No. 50-413
Technical Specifications

Dear Mr. Denton:

This letter contains proposed amendments to the Technical Specifications for Facility Operating License No. NPF-24 for Catawba Unit 1. The attachment contains the proposed change and a discussion of the justification and safety analysis. The analyses are included pursuant to 10 CFR 50.91 and it has been concluded that the proposed amendment does not involve significant hazards considerations.

Pursuant to 10 CFR 50.91 (b)(1) the appropriate South Carolina State Official is being provided a copy of this amendment request.

Very truly yours,

Hal B. Tucker

Hal B. Tucker

RWO:slb

Attachments

cc: Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

NRC Resident Inspector
Catawba Nuclear Station

Mr. Robert Guild, Esq.
Attorney-at-Law
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Charleston, South Carolina 29412

A001

cc: Mr. Jesse L. Riley
Carolina Environmental Study Group
854 Henley Place
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Palmetto Alliance
2135½ Devine Street
Columbia, South Carolina 29205

Heyward G. Shealy, Chief
Bureau of Radiological Health
South Carolina Department of Health & Environmental Control
2600 Bull Street
Columbus, South Carolina 29201

HAL B. TUCKER, being duly sworn, states that he is Vice President of Duke Power Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this revision to the Catawba Nuclear Station Technical Specifications, Appendix A to License No. NPF-24; and that all statements and matters set forth therein are true and correct to the best of his knowledge.

Hal B. Tucker

Hal B. Tucker, Vice President

Subscribed and sworn to before me this 17th day of August, 1984.

Sue C. Merrill

Notary Public

My Commission Expires:

September 20, 1984

Attachment 1

Proposed Amendment to Catawba Unit 1
Technical Specifications 4.6.2 and 4.6.5.6.2 Concerning
The Containment Pressure Control System

CONTAINMENT SYSTEMS

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT SPRAY SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2 Two independent Containment Spray Systems shall be OPERABLE with each Spray System capable of taking suction from the refueling water storage tank and transferring suction to the containment sump.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one Containment Spray System inoperable, restore the inoperable Spray System to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours; restore the inoperable Spray System to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.2 Each Containment Spray System shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position;

b. By verifying, that on recirculation flow, each pump develops a differential pressure of greater than or equal to 185 psid when tested pursuant to Specification 4.0.5;

c. At least once per 18 months during shutdown, by:

1) Verifying that each automatic valve in the flow path actuates to its correct position on a Phase "B" Isolation test signal, and

2) Verifying that each spray pump starts automatically on a Phase "B" Isolation test signal.

3) Verifying that each spray pump is prevented from starting by the Containment Pressure Control System when the containment atmosphere pressure is ~~greater~~ less than or equal to 0.~~8~~ .25 psid and is allowed to start at greater than or equal to 0.45 psid relative to the outside atmosphere,

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4) Verifying that each spray pump discharge valve closes or is prevented from opening by the Containment Pressure Control System when the containment atmosphere pressure is ~~greater~~ less than or equal to 0.25 psid, and is allowed to open at greater than or equal to 0.45 psid relative to the outside atmosphere

5) Verifying that each spray pump is automatically deenergized by the Containment Pressure Control System when the containment atmosphere pressure is ~~greater~~ less than or equal to 0.25 psid.

d. At least once per 5 years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

SURVEILLANCE REQUIREMENTS (Continued)

f. Verifying that the motor-operated valve in the hydrogen skimmer suction line opens automatically and the hydrogen skimmer fans receive a start permissive signal; and

g. Verifying that with the fan off, the return air fan check damper is closed.

4.6.5.6.2 At least once per 18 months, each Containment Air Return and Hydrogen Skimmer System shall be demonstrated OPERABLE by: ~~verifying that each air return fan is prevented from starting by the Containment Pressure Control System when the containment internal pressure is greater than or equal to 0.3 psid relative to the outside atmosphere.~~

a. Verifying that each air return fan is deenergized or is prevented from starting by the Containment Pressure Control System when the containment internal pressure is less than or equal to 0.25 psid and is allowed to start at greater than or equal to 0.45 psid, relative to the outside atmosphere; and

b. Verifying that each air return fan isolation damper closes or is prevented from opening by the Containment Pressure Control System when the containment internal pressure is less than or equal to 0.25 psid and is allowed to open at greater than or equal 0.45 psid, relative to the outside atmosphere.

JUSTIFICATION AND ANALYSIS OF SIGNIFICANT HAZARDS CONSIDERATION

The proposed amendments would change the allowable value for the Containment Pressure Control System (CPCS) to prevent the containment spray pumps, the spray pump discharge valves, the Containment Air Return and Hydrogen Skimmer System air return fans and the air return fan isolation dampers from operating at or above 0.3 psid to at or below 0.25 psid. The amendment would also add an allowable value for the CPCS to assure allowing operation of the spray pumps, spray pump discharge valves, air return fans and air return fan isolation dampers at or above 0.45 psid. The air return fan isolation dampers need to be added to the Surveillance Requirements since they also receive a direct CPCS signal. The additional changes to the pressure setpoints reflect Allowable Values beyond the Trip Setpoint as allowed in Table 3.3-4 Items 7.a and 7.b.

The safety significance of the setpoints is twofold: (1) The CPCS must terminate or prevent operation of Containment Spray (NS) and Containment Air Return (VX) Systems at or below 0.25 psid to avoid exceeding the minimum containment pressure, and (2) The CPCS must provide start permissives to allow NS and VX actuation at or above 0.45 psid. Both of these Allowable Values are currently contained in Technical Specification Table 3.3-4 items 7.a and 7.b. The values in this table are correct and should be specified in Technical Specifications 4.6.2 and 4.6.5.6.2. These values are within safety analysis limits. The current Surveillance requirement is in error in that it calls for the CPCS to block NS and VX at or above 0.3 psid instead of at or below 0.3 psid. The Surveillance should assure that the CPCS is blocking NS and VX at or below 0.25 psid.

10 CFR 50.92 states that a proposed amendment involves no significant hazards considerations if operation in accordance with the proposed amendment would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

(2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) Involve a significant reduction in a margin of safety.

The proposed amendment does not increase the probability or consequences of an accident previously evaluated and it does not create the possibility of a new or different kind of accident.

The proposed acceptance criteria do not involve a significant reduction in a margin of safety in that the proposed changes are already specified as such per Technical Specification Table 3.3-4, items 7.a and 7.b.

The Commission has provided guidance concerning the application of standards of no significant hazard determination by providing certain examples (48 FR 14870). One of the examples of actions likely to involve no significant hazards consideration relates to a change which either

may result in some increase to the probability or consequences of a previously-analysed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan. Because the results of the changes are clearly within the applicable acceptance criteria, the example described above can be applied to this situation.

For the reasons described above, Duke Power Company concludes that the proposed amendments do not involve significant hazards considerations.

Attachment 2

Proposed Amendments to Catawba Unit 1
Technical Specifications Concerning
Administrative and Typographical Errors

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNIT	TOTAL ALLOWANCE (TA)	Z	SENSOR ERROR (S)	TRIP SETPOINT	ALLOWABLE VALUE
8. Auxiliary Feedwater (Continued)					
c. Steam Generator Water Level - Low-Low	~~15~~ 17	14.2 ~~12.18~~	1.5	≥ 17% of span from 0% to 30% RTP increasing linearly to ≥ 54.9% of span from 30% to 100% RTP	≥ ~~10.85~~ 15.3 % of span from 0% to 30% RTP increasing linearly to ≥ 53.2% of span from 30% to 100% RTP
d. Safety Injection	See Item 1. above for all Safety Injection Setpoints and Allowable Values.				
e. Loss-of-Offsite Power	N.A.	N.A.	N.A.	≥ 3500 V	≥ 3200 V
f. Trip of All Main Feedwater Pumps	N.A.	N.A.	N.A.	N.A.	N.A.
g. Auxiliary Feedwater Suction Pressure-Low					
1) 1 CAPS 5220, 5221, 5222	N.A.	N.A.	N.A.	≥ 10.5 psig	≥ 9.5 psig
2) 1 CAPS 5230, 5231, 5232	N.A.	N.A.	N.A.	≥ 10.9 psig	≥ 9.9 psig
9. Containment Sump Recirculation					
a. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	N.A.
b. Refueling Water Storage Tank Level-Low Coincident With Safety Injection	See Item 1. above for all Safety Injection Setpoints and Allowable Values.				

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION FOR PLANT OPERATIONS

FUNCTIONAL UNIT	CHANNELS TO TRIP/ALARM	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM/TRIP SETPOINT	ACTION
1. Containment					
a. Containment Atmosphere - High Gaseous Radioactivity (Low Range - EMF-39)	1	1	All	***	30
b. Reactor Coolant System Leakage Detection					
1) Particulate Radioactivity (Low Range - EMF-38)	N.A.	1	1, 2, 3, 4	N.A.	33
2) Gaseous Radioactivity (Low Range - EMF-39)	N.A.	1	1, 2, 3, 4	N.A.	33
2. Fuel Storage Pool Areas					
a. High Gaseous Radioactivity (Low Range - EMF-42)	1	1	**	$\leq$ 1.7×10^{-4} µCi/ml	34
b. Criticality-Radiation Level (Fuel Bridge - Low Range - EMF-15)	1	1	*	$\leq$ 15 mR/h	32
3. Control Room					
Air Intake-Radiation Level - High Gaseous Radioactivity (Low Range - EMF-43 A & B)	1/intake	2/~~intake~~ station	All	$\leq$ 1.7×10^{-4} µCi/ml	31
4. Auxiliary Building Ventilation High Gaseous Radioactivity (Low Range - EMF-41)	1	1	All	$\leq$ 1.7×10^{-4} µCi/ml	35
5. Component Cooling Water System (EMF-46 A&B)	1	1	All	$\leq$ 1×10^{-3} µCi/ml	36 37

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

h. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting both diesel generators simultaneously, during shutdown, and verifying that both diesel generators accelerate to at least 441 rpm in less than or equal to 11 seconds; and

i. At least once per 10 years by:

1) Draining each fuel oil storage tank, removing the accumulated sediment and cleaning the tank using a sodium hypochlorite solution or its equivalent, and

2) Performing a pressure test of those portions of the diesel fuel oil system designed to Section III, subsection ND of the ASME Code at a test pressure equal to 110% of the system design pressure.

4.8.1.1.3 Reports - All diesel generator failures, valid or non-valid, shall be reported in a Special Report to the Commission pursuant to Specification 6.9.2 within 30 days. Reports of diesel generator failures shall include the information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977. If the number of failures in the last 100 valid tests (on a per nuclear unit basis) is greater than or equal to 7, the report shall be supplemented to include the additional information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977.

4.8.1.1.4 Diesel Generator Batteries - Each diesel generator 125-volt battery bank and charger shall be demonstrated OPERABLE:

a. At least once per 7 days by verifying that:

1) The electrolyte level of each battery is at or above the low mark and at or ~~above~~ below the high mark,

2) The overall battery voltage is greater than or equal to 125 volts on float charge, and

3) The individual cell voltage is greater than or equal to 1.36 volts on float charge.*

b. At least once per 92 days and within 7 days after a battery discharge with battery terminal voltage below 110 volts, or battery overcharge with battery terminal voltage above 150 volts, by verifying that:

1) There is no visible corrosion at either terminals or connectors, and

*Two different cells shall be tested each month.

ANALYSIS OF SIGNIFICANT HAZARDS CONSIDERATION

Because the proposed amendments involve only administrative or typographical changes, they do not involve significant hazards considerations according to the standards of 10 CFR 50.92.

Page 3/4 3-31, the correct values are contained in the final Westinghouse Setpoint Study. The values currently contained in Technical Specification Table 3.3-4, Item 8.c are from a prior Setpoint Study. Technical Specification Table 2.2-1, Item 13 contains the same trip function, however the numbers reflected there are correct. Thus, due to an oversight, the values in Table 3.3-4 did not get revised appropriately and should be corrected.

Page 3/4 3-52, there are two separate intakes for the control room each with one radiation monitor channel for a total of two channels for the station.

Page 3/4 8-7, an administrative error needs to be corrected in that the electrolyte level needs to remain below, not above, the high mark.