

DUKE POWER COMPANY

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VICE PRESIDENT  
NUCLEAR PRODUCTION

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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

Dear Mr. Denton:

My letter of July 31, 1984 submitted a proposed amendment to the Technical Specifications for Facility Operating License No. NPF-24 for Catawba Unit 1. The purpose of this letter is to supplement the previous discussion of the emergency or exigent circumstances involved in the requested amendment and to amend the previously requested change to the Bases for Specification 3/4 7.1.2.

As previously identified, portions of the current Technical Specification surveillance requirements for the auxiliary feedwater pumps can not be met. These current requirements are nominal design conditions as reflected in FSAR Tables 10.4.9-1 and -2, and do not reflect the test configuration for the pumps. As stated in the attached revised bases, the proposed surveillance requirements reflect the minimum auxiliary feedwater flow required for cooldown to less than 350°F from normal operating conditions in the event of a total loss-of-offsite power as previously stated in FSAR Section 10.4.9.1.

On or about July 16, 1984, Catawba station personnel concluded that auxiliary feedwater pump test criteria in Technical Specification 4.7.1.2.1.a could not be met. Duke's Design Engineering Department then reviewed the Auxiliary Feedwater System minimum flow requirements and determined corresponding flows through the test Loop to the upper surge tank (FSAR Figure 10.4.9-1). After the required station and Nuclear Safety Review Board reviews, the amendment was filed on July 31, 1984. Thus in the Licensees' view, the amendment request was developed, reviewed and filed in a timely manner.

Catawba Unit 1 is currently in Mode 5 and is scheduled to enter Mode 4 on August 26, 1984 and Mode 3 on September 5, 1984. If the requested amendment does not become effective until 30 days after publication in the Federal Register (assumed publication date of August 20, 1984) then the unit would incur at least a 14 day schedule delay and entry into Mode 3 could not proceed as scheduled. There is a substantial probability that a day-for-day delay would result in the startup schedule of Catawba Unit 1. Such delay will have a substantial financial and economic impact

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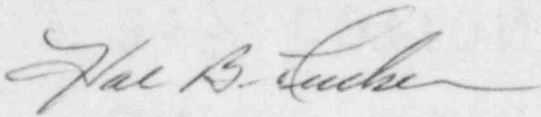
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Mr. Harold R. Denton, Director  
August 17, 1984  
Page 2

For each day's delay in the commercial operation of Catawba Unit 1, costs of approximately \$500,000 a day will accrue against the Licensees' customers. Duke itself owns only a small portion (25 percent) of the Catawba Plant and the remainder is owned by small cooperative or municipal electric systems.

As provided in the foregoing discussion, Licensees have demonstrated, in accordance with 10 CFR 50.91, that a timely application was filed and that emergency or exigent circumstances exist. It is therefore requested that the previously requested amendment to Catawba Unit 1 Technical Specification 4.7.1.2.1 and the attached amended change to the Bases for this specification be granted on or before September 5, 1984.

Very truly yours,



Hal B. Tucker

ROS:slb

Attachment

cc: Mr. James P. O'Reilly, 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  
P. O. Box 12097  
Charleston, South Carolina 29412

Mr. Jesse L. Riley  
Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28207

Mr. Harold R. Denton, Director  
August 17, 1984  
Page 3

cc: Palmetto Alliance  
2135½ Devine Street  
Columbia, South Carolina 29205

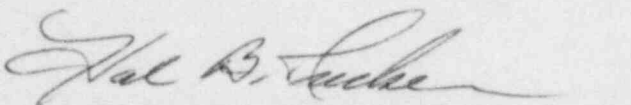
Heyward G. Shealy, Chief  
Bureau of Radiological Health  
South Carolina Department of Health & Environmental Control  
2600 Bull Street  
Columbus, South Carolina 29201

Mr. Harold R. Denton, Director

August 17, 1984

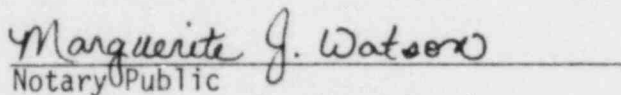
Page 4

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, Vice President

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



Notary Public

My Commission Expires:

August 1, 1989



## PLANT SYSTEMS

### BASES

#### 3/4.7.1.2 AUXILIARY FEEDWATER SYSTEM

The OPERABILITY of the Auxiliary Feedwater System ensures that the Reactor Coolant System can be cooled down to less than 350°F from normal operating conditions in the event of a total loss-of-offsite power.

*at least 480* *system*  
~~The~~ Each electric motor-driven Auxiliary Feedwater pump is capable of delivering a total feedwater flow of 500 gpm at a pressure of 1210 psig to the entrance of the steam generators. ~~The steam-driven auxiliary feedwater pump is capable of delivering a total feedwater flow of 1000 gpm at a pressure of 1210 psig to the entrance of the steam generators.~~ This capacity is sufficient to ensure that adequate feedwater flow is available to remove decay heat and reduce the Reactor Coolant System temperature to less than 350°F when the Residual Heat Removal System may be placed into operation.

*at least two of*

#### 3/4.7.1.3 SPECIFIC ACTIVITY

The limitations on Secondary Coolant System specific activity ensure that the resultant offsite radiation dose will be limited to a small fraction of 10 CFR Part 100 dose guideline values in the event of a steam line rupture. This dose also includes the effects of a coincident 1 gpm reactor to secondary tube leak in the steam generator of the affected steam line. These values are consistent with the assumptions used in the safety analyses.

#### 3/4.7.1.4 MAIN STEAM LINE ISOLATION VALVES

The OPERABILITY of the main steam line isolation valves ensures that no more than one steam generator will blow down in the event of a steam line rupture. This restriction is required to: (1) minimize the positive reactivity effects of the Reactor Coolant System cooldown associated with the blowdown, and (2) limit the pressure rise within containment in the event the steam line rupture occurs within containment. The OPERABILITY of the main steam isolation valves within the closure times of the Surveillance Requirements are consistent with the assumptions used in the safety analyses.

#### 3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

The limitation on steam generator pressure and temperature ensures that the pressure-induced stresses in the steam generators do not exceed the maximum allowable fracture toughness stress limits. The limitations of 70°F and 200 psig are based on a steam generator RT<sub>NDT</sub> of 10°F and are sufficient to prevent brittle fracture.