SURVEILLANCE REQUIREMENTS (Continued)

4.7.13.2 The Standby Shutdown System diesel starting 24-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 below the high mark; and

2) The overall battery voltage is greater than or equal to 24 volts on float charge.

b. At least once per 92 days by verifying that the individual cell voltage is greater than or equal to 1.36 volts on float charge, and

c. At least once per 18 months by verifying that:

1) The batteries, cell plates, and battery racks show no visual indication of physical damage or abnormal deterioration, and

2) The battery-to-battery and terminal connections are clean, tight, and free of corrosion.

4.7.13.3 The Standby Makeup Pump water supply shall be demonstrated OPERABLE by:

a. Verifying at least once per 7 days{

~~1)~~ That the requirements of Specification 3.9.10 are met and the boron concentration in the storage pool is greater than or equal to the minimum specified in the Core Operating Limits Report~~, or~~

~~2) That a contained borated water volume of at least 112,320 gallons with a boron concentration of greater than or equal to the minimum specified in the Core Operating Limits Report is available and capable of being aligned to the Standby Makeup Pump.~~

b. Verifying at least once per 92 days that the Standby Makeup Pump develops a flow of greater than or equal to 26 gpm at a pressure greater than or equal to 2488 psig.

4.7.13.4 The Standby Shutdown System 250/125-Volt Battery Bank and its associated charger shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying:

1) That the electrolyte level of each battery is above the plates, and

SURVEILLANCE REQUIREMENTS (Continued)

4.7.13.2 The Standby Shutdown System diesel starting 24-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 below the high mark; and

2) The overall battery voltage is greater than or equal to 24 volts on float charge.

b. At least once per 92 days by verifying that the individual cell voltage is greater than or equal to 1.36 volts on float charge, and

c. At least once per 18 months by verifying that:

1) The batteries, cell plates, and battery racks show no visual indication of physical damage or abnormal deterioration, and

2) The battery-to-battery and terminal connections are clean, tight, and free of corrosion.

4.7.13.3 The Standby Makeup Pump water supply shall be demonstrated OPERABLE by:

a. Verifying at least once per 7 days~~:~~

~~1)~~ That the requirements of Specification 3.9.10 are met and the boron concentration in the storage pool is greater than or equal to the minimum specified in the Core Operating Limits Report~~, or~~

~~2) That a contained borated water volume of at least 112,320 gallons with a boron concentration of greater than or equal to the minimum specified in the Core Operating Limits Report is available and capable of being aligned to the Standby Makeup Pump.~~

b. Verifying at least once per 92 days that the Standby Makeup Pump develops a flow of greater than or equal to 26 gpm at a pressure greater than or equal to 2488 psig.

4.7.13.4 The Standby Shutdown System 250/125-Volt Battery Bank and its associated charger shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying:

1) That the electrolyte level of each battery is above the plates, and

Attachment 2

Catawba Units 1 and 2

Technical Specifications

Unit 1

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Unit 2

Remove Page	Insert Page
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SURVEILLANCE REQUIREMENTS (Continued)

4.7.13.2 The Standby Shutdown System diesel starting 24-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 below the high mark; and

2) The overall battery voltage is greater than or equal to 24 volts on float charge.

b. At least once per 92 days by verifying that the individual cell voltage is greater than or equal to 1.36 volts on float charge, and

c. At least once per 18 months by verifying that:

1) The batteries, cell plates, and battery racks show no visual indication of physical damage or abnormal deterioration, and

2) The battery-to-battery and terminal connections are clean, tight, and free of corrosion.

4.7.13.3 The Standby Makeup Pump water supply shall be demonstrated OPERABLE by:

a. Verifying at least once per 7 days that the requirements of Specification 3.9.10 are met and the boron concentration in the storage pool is greater than or equal to the minimum specified in the Core Operating Limits Report.

b. Verifying at least once per 92 days that the Standby Makeup Pump develops a flow of greater than or equal to 26 gpm at a pressure greater than or equal to 2488 psig.

4.7.13.4 The Standby Shutdown System 250/125-Volt Battery Bank and its associated charger shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying:

1) That the electrolyte level of each battery is above the plates, and

SURVEILLANCE REQUIREMENTS (Continued)

4.7.13.2 The Standby Shutdown System diesel starting 24-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 below the high mark; and

2) The overall battery voltage is greater than or equal to 24 volts on float charge.

b. At least once per 92 days by verifying that the individual cell voltage is greater than or equal to 1.36 volts on float charge, and

c. At least once per 18 months by verifying that:

1) The batteries, cell plates, and battery racks show no visual indication of physical damage or abnormal deterioration, and

2) The battery-to-battery and terminal connections are clean, tight, and free of corrosion.

4.7.13.3 The Standby Makeup Pump water supply shall be demonstrated OPERABLE by:

a. Verifying at least once per 7 days that the requirements of Specification 3.9.10 are met and the boron concentration in the storage pool is greater than or equal to the minimum specified in the Core Operating Limits Report.

b. Verifying at least once per 92 days that the Standby Makeup Pump develops a flow of greater than or equal to 26 gpm at a pressure greater than or equal to 2488 psig.

4.7.13.4 The Standby Shutdown System 250/125-Volt Battery Bank and its associated charger shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying:

1) That the electrolyte level of each battery is above the plates, and

Attachment 3

Description of Proposed Changes and Technical Justification

Description of Proposed Change

This amendment to the Catawba Technical Specifications (TS) proposes a change to the existing surveillance requirement for the minimum volume of borated water supply to the Standby Makeup Pump (SMP).

Currently Catawba TS 4.7.13.3a.2 is as follows:

"That a contained borated water volume of at least 112,320 gallons with a boron concentration of greater than or equal to the minimum specified in the Core Operating Limits Report is available and capable of being aligned to the Standby Makeup Pump."

This amendment would eliminate this TS surveillance requirement and change the remaining TS 4.7.13.3a.1 to:

"Verifying at least once per 7 days that the requirements of Specification 3.9.10 are met and the boron concentration in the storage pool is greater than or equal to the minimum specified in the Core Operating Limits Report."

As shown above, the change proposed in this amendment would eliminate the surveillance requirement for verifying that a contained minimum borated water volume of 112,320 gallons be available to supply the SMP. Catawba's current operating practices have caused this TS surveillance requirement to become redundant and unnecessary.

Background

A recent NRC audit of the Catawba Standby Shutdown System (SSS), raised questions concerning apparent non-conservative design assumptions used in the calculation for the SMP sizing. The SMP is part of the SSS. The results of the NRC audit of the Catawba SSS were documented in NRC Inspection Report 50-413, 414/96-13; however, no issues specifically related to TS 4.7.13.3a.2 were identified in this report. Nonetheless, during the review of this NRC inspection report, the need for additional corrective actions related to TS 4.7.13.3a.2 was self-identified by Duke. Consequently, Duke is pursuing this license amendment request in a proactive manner.

Attachment 3

Description of Proposed Changes and Technical Justification

The SMP was designed to have a flow capacity of 26 gpm and operate for a period of 72 hours (design basis). Therefore, the current 112,320 gallon volume requirement was derived from:

(26 gpm) x (60 min/hr) x (72 hr) = 112,320 gallons

Data obtained from in-plant testing has shown that the actual flow rate of the SMP is in the range of 26 to 32 gpm. Consequently, at the higher end of this range the present minimum volume stated in TS 4.7.13.3a.2 would not be sufficient to supply the pump for the required design basis period of the SSS. Based on the 32 gpm value, the minimum supply volume required to be consistent with the SSS design basis would be 138,240 gallons. Likewise derived from:

(32 gpm) x (60 min/hr) x (72 hr) = 138,240 gallons

or, 25,920 gallons more than the minimum value currently required by TS 4.7.13.3a.2.

At the time of the NRC's SSS audit at Catawba, Duke took immediate actions to confirm operability of the SSS. PIP 0-C96-1824 was initiated as a result of the issues identified in the NRC audit. PIP, the Problem Investigation Process, is the Duke internal investigation and corrective action program that includes provisions for determining operability. As part of the operability determination process, a 10CFR50.59 evaluation was also performed and no unreviewed safety questions were identified. Nonetheless, Duke is proposing the elimination of the surveillance requirement in TS 4.7.13.3a.2. The decision to pursue removing TS 4.7.13.3a.2 from the Catawba TS, instead of just increasing the required minimum volume from 112,320 to 138,240 gallons, is because an adequate supply of water is already assured by compliance with existing TS 4.7.13.3a.1 and 3.9.10.

Discussion

The SMP suction is supplied from the fuel transfer canal region of the Spent Fuel Storage Pool (SFP). Catawba's minimum SFP level required by TS 3.9.10 is 23 feet above the irradiated fuel. Based upon the 23 feet height of water, the volume available to supply the SMP was calculated to be approximately 415,000 gallons. This volume conservatively

envelopes the 138,240 gallons required by the SMP. This Duke calculation confirmed sufficient SFP volume is, and always has been, available to meet the design basis requirements of the SSS. It is emphasized that existing TS 3.9.10 requires a volume well in excess of the 138,240 gallons required by the SMP.

Under present operating practices, there is no separate surveillance performed at Catawba to meet the requirements of TS 4.7.13.3a.2. Since the SMP is always supplied from the SFP, the periodic surveillance procedures performed to meet the requirements of TS 4.7.13.3a.1 and 3.9.10 bound the requirements of TS 4.7.13.3a.2 as well. Therefore, this amendment effectively has no impact on the periodic surveillance activities currently being performed at Catawba. Consequently, TS 4.7.13.3a.2 is unnecessary at Catawba, and the "or" portion of TS 4.7.13.3a.1 is not needed as well.

The requirements of TS 4.7.13.3a.1 and 3.9.10 are confirmed by activities contained in approved periodic surveillance procedures in place for each Catawba unit.

Conclusion

The SSS provides Catawba with an independent means to achieve and maintain a hot standby condition for three days (72 hours) in the event of an Appendix R fire, security event, station blackout, or other severe accident scenario. The change proposed in this amendment will maintain the ability of the SMP (part of the SSS) to perform its design basis function. A Duke calculation has confirmed that the minimum 415,000 gallons of borated water required by compliance with existing TS 4.7.13.3a.1 and 3.9.10, are more than adequate to supply the SMP for a 72 hour period. These existing TS and applicable Catawba procedures provide sufficient controls to ensure an available suction supply well above the required volume of 138,240 gallons.

The change proposed in this amendment is conservative in nature, since the affected parameter continues to be enveloped by existing alternate TS. This amendment will maintain Catawba's design basis while allowing the elimination of an unnecessary surveillance.

Attachment 3

Description of Proposed Changes and Technical Justification

The proposed changes are consistent with what is foreseen for the future at Catawba following implementation of the new Improved Standard Technical Specifications (ISTS). Relocation of the SSS TS to a licensee controlled document (which is the practice at Duke's McGuire Nuclear Station) is consistent with the guidance contained in NUREG-1431, *Standard Technical Specifications for Westinghouse Plants*. However, in accordance with conservative management philosophy and applicable administrative controls, Duke is pursuing this amendment request separately and prior to Catawba's ISTS submittal date. This is being done in order to address an identified inconsistency between Catawba's TS and current operating practices in a more timely manner.

The Catawba Updated Final Safety Analysis Report (UFSAR) was reviewed for any impact caused by this license amendment request. The SMP is discussed in Sections 9.1.3.1.3, 9.3.4.3.1, and 9.3.4.3.3; the Spent Fuel Storage Facility is discussed in Section 9.1.2; and the Fuel Handling System is discussed in Section 9.1.4 of the UFSAR. These sections were reviewed and it has been determined that no changes to the UFSAR will be required as a result of this amendment.

Attachment 4

No Significant Hazards Consideration Evaluation

Pursuant to 10CFR50.92, Duke Power Company has determined that this license amendment request involves No Significant Hazards Considerations. The change proposed in this amendment applies to a Technical Specifications (TS) surveillance requirement for the minimum volume of borated water available to the Standby Makeup Pump (SMP). The change eliminates a surveillance requirement for a contained borated water supply of at least 112,320 gallons.

The determination of no significant hazards was made by applying the NRC established standards contained in regulation 10CFR50.92. These standards assure that any changes to the operation of Catawba Nuclear Station in accordance with this amendment consider the following:

1) **Will the change involve a significant increase in the probability or consequences of an accident previously evaluated?**

No. This amendment to the Catawba TS maintains the necessary minimum volume of borated water available to mitigate a design basis SSS event through a 72 hour period. Eliminating TS Surveillance 4.7.13.3a.2 does not increase the probability or consequences of any previously evaluated accident, since an adequate borated water source for the SMP is continued to be required by other existing TS.

2) **Will the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

No. This amendment to the Catawba TS continues to ensure that the necessary minimum volume of borated water is available to mitigate an SSS event. The SSS is required to mitigate certain previously evaluated design basis fire, security, and other events. This amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. This amendment changes the TS applicable to an accident mitigating function and does not impact any accident initiator, either new, different, or previously evaluated.

3) Will the change involve a significant reduction in a margin of safety?

No. This amendment continues to ensure that the necessary minimum volume of borated water is available to mitigate an SSS design basis event. The available minimum volume is maintained well above the design basis requirement. Since the source of borated water that is available to supply the SMP continues to be controlled by existing TS (TS 3.7.13.3a.1 and 3.9.10), which both envelope the current 112,320 gallons, sufficient volume has been and will continue to be present to meet design basis requirements. Therefore, no reduction in a margin of safety will result from the changes proposed in this amendment.

Attachment 5
Environmental Assessment/Impact Statement

Pursuant to 10CFR51.22(b), an evaluation of this license amendment request has been performed to determine whether or not it meets the criteria for categorical exclusion set forth in 10CFR51.22(c)(9) of the regulations.

This amendment being requested for the Catawba Technical Specifications (TS) eliminates a surveillance requirement for a contained borated water supply of at least 112,320 gallons for the Standby Makeup Pump (SMP). The source of borated water that is normally aligned to these pumps continues to be the Spent Fuel Pool (SFP). The existing design bases volume of the SFP, as well as an identified makeup source, the Refueling Water Storage Tank, are not affected by this amendment. Consequently, there is in actuality, no additional volume or type of effluent available for any adverse environmental impact or personnel exposure.

It has been determined there are:

1) No significant hazards consideration (see Attachment 4);

2) No significant change in the types, or significant increase in the amounts, of any effluents that may be released offsite; and

3) No significant increase in individual or cumulative occupational radiation exposures involved.

Therefore, this amendment to the Catawba TS, meets the criteria of 10 CFR 51.22(c)(9) for categorical exclusion from an environmental assessment or impact statement.