

ATTACHMENT 1

MARKED-UP TECHNICAL SPECIFICATION
SURVEILLANCE 4.7.13.1.C
CATAWBA NUCLEAR STATION

PLANT SYSTEMS

3/4.7.13 STANDBY SHUTDOWN SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.13 The Standby Shutdown System (SSS) shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION: (Units 1 and 2)

- a. With the Standby Shutdown System inoperable, restore the inoperable equipment to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in at least HOT SHUTDOWN within the following 6 hours.
- b. With the total leakage from UNIDENTIFIED LEAKAGE, IDENTIFIED LEAKAGE and reactor coolant pump seal leakage greater than 26 gpm, declare the Standby Makeup Pump inoperable and take ACTION a., above.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.13.1 The Standby Shutdown System diesel generator shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying:
 - 1) The fuel level in the fuel storage tank is greater than or equal to 67 inches, and
 - 2) The diesel starts from ambient conditions and operates for at least 30 minutes at greater than or equal to 700 kW.
- b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank, obtained in accordance with ASTM-D270-1975, is within the acceptable limits specified in Table 1 of ASTM-D975-1977 when checked for viscosity and water and sediment; and
- c. At least once per 18 months, ~~during shutdown~~, by subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for the class of service.

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NEW ORIGINAL PAGES
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- c. At least once per 18 months by subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for the class of service.

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

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 2) The total battery terminal voltage is greater than or equal to 258/129 volts on float charge.
 - b. At least once per 92 days by verifying that the specific gravity is appropriate for continued service of the battery, and
 - c. At least once per 18 months by verifying that:
 - 1) The batteries, cell plates, and battery racks show no visual indications of physical damage or abnormal deterioration, and
 - 2) The battery-to-battery and terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material.
- 4.7.13.5 The Steam Turbine Driven Auxiliary Feedwater Pump and associated components shall be demonstrated OPERABLE at least once per 18 months by verifying that the system functions as designed from the Standby Shutdown System.
- 4.7.13.6 Each Standby Shutdown System instrumentation device shall be demonstrated OPERABLE by performance of a CHANNEL CHECK at least once per 31 days and a CHANNEL CALIBRATION at least once per 18 months.

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 - 2) The diesel starts from ambient conditions and operates for at least 30 minutes at greater than or equal to 700 kW.
- b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank, obtained in accordance with ASTM-D270-1975, is within the acceptable limits specified in Table 1 of ASTM-D975-1977 when checked for viscosity and water and sediment; and
- c. At least once per 18 months by subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for the class of service.

SURVEILLANCE REQUIREMENTS (Continued)

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- 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.

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- 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.

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- 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)

- 2) The total battery terminal voltage is greater than or equal to 258/129 volts on float charge.
 - b. At least once per 92 days by verifying that the specific gravity is appropriate for continued service of the battery, and
 - c. At least once per 18 months by verifying that:
 - 1) The batteries, cell plates, and battery racks show no visual indications of physical damage or abnormal deterioration, and
 - 2) The battery-to-battery and terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material.
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ATTACHMENT 2

**DESCRIPTION OF PROPOSED CHANGES
AND TECHNICAL JUSTIFICATION**

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AND TECHNICAL JUSTIFICATION**

The Catawba Standby Shutdown System (SSS) is a non-nuclear safety related system and is shared between Units 1 & 2. It is designed to mitigate the consequences of postulated fire and security related incidents by providing the capability to maintain Hot Standby conditions and by controlling and monitoring vital systems from locations external to the main control room and auxiliary shutdown panels. The SSS provides an alternate and independent means of achieving and maintaining Hot Standby for one or both units. Capability to maintain hot standby for both units for a period of three days without damage control measures is provided.

In addition to serving to mitigate fire and security related incidents, the SSS also performs mitigating functions for a loss of all AC power event (station blackout) by utilizing the SSS diesel generator (DG) as the Alternate AC (AAC) source for Catawba. The SSS DG was selected as the AAC source to fulfill 10 CFR 50.63 ("The Blackout Rule") requirements for Catawba.

Unlike Catawba Nuclear Station, many nuclear plants do not have a SSS facility. Prior to initial Unit 1 power operations, the Catawba Technical Specification surveillance for the SSS diesel generator inspection (4.7.13.1.c) was patterned after a similar surveillance for the Emergency Diesel Generators (4.8.1.1.2.g.1), to be performed during shutdown. Furthermore, when the Facility Operating License for Unit 2 was granted and Catawba's Technical Specifications then became applicable for both Units 1 and 2, the "during shutdown" requirement for the SSS diesel generator inspection was not removed, via a license amendment, as it should have been.

The proposed change to Surveillance Requirement 4.7.13.1.c is to remove the "during shutdown" requirement for the 18 month SSS diesel generator inspection which is performed in accordance with procedures prepared in conjunction with the manufacturer's recommendations. Performing the surveillance during shutdown would require both units to be shutdown to perform the inspection surveillance.

Upon initiation of performing the surveillance inspection, the action statement for the SSS system, as defined in Technical Specification 3.7.13 is entered which provides for an allowable outage time of 7 days as given in the Limiting Condition For Operation. The surveillance inspection must be completed within this time frame, otherwise both units must be in Hot Standby within the next 6 hours and in at least Hot Shutdown within the following 6 hours. Past surveillance inspections have been completed within this time frame, therefore restricting the surveillance inspection to be performed only during shutdown is unnecessary.

Since the SSS diesel generator also performs mitigating functions for a loss of all AC power event (station blackout), the Maintenance Rule PRA Matrix requires verification of available alternate power sources when either unit is in Modes 1 - 3, during both the work planning and implementation stages, prior to removal of the SSS diesel Generator from service. These controls also provide guidance in the event work is in progress and the alternate source of power becomes inoperable.

ATTACHMENT 3

**NO SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS
AND ENVIRONMENTAL IMPACT ASSESSMENT**

NO SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

As required by 10 CFR 50.91, this analysis is provided concerning whether the requested Technical Specification amendments involve significant hazards considerations, as defined by 10 CFR 50.92. The standard for determining that a Technical Specification amendment request involves no significant hazards considerations requires that operation of the facility in accordance with the requested amendment will 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 the margin of safety.

CRITERION 1

The proposed amendment seeks to change the surveillance requirements to allow the SSS DG periodic inspection with one or both units on line. The surveillance can be safely completed as proposed without affecting unit operation. The equipment would not be removed from service for a time that would exceed the current Limiting Condition For Operation or the appropriate action statement would be entered. The probability or consequences of any accident previously evaluated will not be significantly increased because the removal of the SSS DG from service can be safely performed while one or both units are operating.

CRITERION 2

The proposed amendment change does not change any actual surveillance requirements. The change simply allows the 18 month SSS DG inspection to be performed at different unit conditions. The performance of the surveillance with the units operating do not require any new component configurations that would reduce the ability of any equipment to mitigate an accident. The station is not degraded beyond that which has been previously evaluated. Therefore the proposed change does not create the possibility of a new or different kind of accident.

CRITERION 3

The allowed outage time for the SSS DG, as specified by the Limiting Condition For Operation, defines the required margin of safety for equipment operability. Removing the SSS DG from service for periodic inspection and returning it to service within the allowed outage time does not involve a significant reduction in the margin of safety.

ENVIRONMENTAL IMPACT ANALYSIS

The proposed Technical Specification amendment has been reviewed against the criteria of 10 CFR 51.22 for environmental considerations. As previously shown above, the proposed change does not involve significant hazards consideration nor increase the types and amounts of effluents that may be released offsite, nor increase individual or cumulative occupational radiation exposure. Based on this, the proposed amendment meets the criteria given in 10 CFR 51.22(C)(9) for categorical exclusion from the requirements for an Environmental Impact Statement.