UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUL 03 1986

Docket Nos.: 50-413
and 50-414

Mr. H. B. Tucker, Vice President
Nuclear Production Department
Duke Power Company
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

Subject: Issuance of Amendment No. 8 to Facility Operating License NPF-35, Amendment No. 1 to Facility Operating License NPF-52 and Exemption to 10 CFR Part 50, Appendix J - Catawba Nuclear Station, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 8 to Facility Operating License NPF-35 and Amendment No. 1 to Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications in response to your application dated May 5, 1986.

These amendments extend on a one-time basis, by a maximum of three months, certain surveillance requirements and, by a maximum of four months, the inspection of each diesel generator all of which require reactor shutdown. Based on a telephone discussion on June 23, 1986, with Mr. Roger W. Ouellette of your company, to clarify the required surveillances the words "B and" were inserted between "type" and the letter "C" in the first line in Table 3.6-1a in accordance with your requested modification to your application for amendments.

In connection with this action, the Commission has granted a temporary exemption from the regulations for Catawba Unit 1 which allows Type B and C tests for containment penetrations and isolation valves to be deferred by about six weeks. Related information in support of the exemption request was submitted in your letters dated May 5 and 9, 1986, and June 13, 1986.

We find that granting the proposed temporary exemption from the requirements of Appendix J is authorized by law and will not present an undue risk to the public health and safety, and is consistent with the common defense and security. We further find that special circumstances justify the exemption, since application of the rule would not serve the underlying purpose of the rule but would result in hardship and costs not contemplated by the rule, and also since the exemption would provide only temporary relief (i.e., six weeks) from the above requirements. An environmental assessment of the proposed exemption was published in the Federal Register on June 25, 1986.

A copy of the related safety evaluation supporting Amendment No. 8 to Facility Operating License NPF-35, Amendment No. 1 to Facility Operating License NPF-52, and the Exemption from 10 CFR Part 50, Appendix J is enclosed.

Notice of issuance will be included in the Commission's next bi-weekly Federal Register notice.

Sincerely,

Kahtan Jabbour

Kahtan Jabbour, Project Manager
PWR Project Directorate No. 4
Division of PWR Licensing-A

Enclosures:
1. Amendment No. 8 to NPF-35
2. Amendment No. 1 to NPF-52
3. Exemption
4. Safety Evaluation

cc w/encl:
See next page

DISTRIBUTION:
See attached page

| | | |
|---|---|---|
| PWR#4:DPWR-A | PWR#4/DPWR-A | PWR#4/DPWR-A |
| KJabbour:mac | MDuncan | BJYoungblood |
| 06/24/86 | 06/25/86 | 06/3/86 |

July 3, 1986

AMENDMENT NO. 8 TO FACILITY OPERATING LICENSE NPF-35 - 03 JUL 1986
AMENDMENT NO. 1 TO FACILITY OPERATING LICENSE NPF-52
CATAWBA NUCLEAR POWER STATION, UNITS 1 AND 2

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION

SALUDA RIVER ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-413

CATAWBA NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 8
License No. NPF-35

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment to the Catawba Nuclear Station, Unit 1 (the facility) Facility Operating License No. NPF-35 filed by the Duke Power Company acting for itself, North Carolina Electric Membership Corporation and Saluda River Electric Cooperative, Inc., (licensees) dated May 5, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

   D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachments to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-35 is hereby amended to read as follows:

   (2) Technical Specifications and Environmental Protection Plan

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 8, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Duke Power Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Kahtan Jabbour, Project Manager
PWR Project Directorate No. 4
Division of PWR Licensing-A

Attachment:
Technical Specification Changes

Date of Issuance: July 3, 1986

PSB/PWR-A 7/3/86

* SEE PREVIOUS CONCURRENCE

| PWR#4:DPWR-A | PWR#4/DPWR-A | OELD | PWR#4/DPWR-A |
|---|---|---|---|
| KJabbour:mac | MDuncan | *CWoodhead | BJYoungblood |
| 06/2/86 | 06/ /86 | 06/26/86 | 06/3/86 |

*See Previous Concurrence

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

NORTH CAROLINA MUNICIPAL POWER AGENCY NO. 1

PIEDMONT MUNICIPAL POWER AGENCY

DOCKET NO. 50-414

CATAWBA NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 1
License No. NPF-52

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment to the Catawba Nuclear Station, Unit 2 (the facility) Facility Operating License No. NPF-52 filed by the Duke Power Company acting for itself, North Carolina Municipal Power Agency No. 1 and Piedmont Municipal Power Agency (licensees) dated May 5, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

   D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachments to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-52 is hereby amended to read as follows:

   (2) Technical Specifications and Environmental Protection Plan

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 1 , and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Duke Power Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Kahtan Jabbour, Project Manager
PWR Project Directorate No. 4
Division of PWR Licensing-A

Attachment:
Technical Specification Changes

Date of Issuance: July 3, 1986

* SEE PREVIOUS CONCURRENCE

| PWR#4:DPWR-A | PWR#4/DPWR-A | OELD | PWR#4/DPWR-A |
|---|---|---|---|
| KJabbour:mac | MDuncan | *CWoodhead | BJYoungblood |
| 06/ 2 /86 | 06/ /86 | 06/26/86 | 06/ 3/86 |

*See Previous Concurrence

ATTACHMENT TO LICENSE AMENDMENT NO. 8

FACILITY OPERATING LICENSE NO. NPF-35

DOCKET NO. 50-413

AND TO

LICENSE AMENDMENT NO. 1

FACILITY OPERATING LICENSE NO. NPF-52

DOCKET NO. 50-414

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

| Amended Page | Overleaf Page |
|---|---|
| 3/4 3-68 | 3/4 3-67 |
| 3/4 3-69 | 3/4 3-70 |
| 3/4 3-79 | 3/4 3-80 |
| 3/4 3-93 | |
| 3/4 4-19 | 3/4 4-20 |
| 3/4 6-3 | |
| 3/4 6-4 | |
| 3/4 6-7a (new page) | |
| 3/4 7-42 | 3/4 7-41 |
| 3/4 8-4 | 3/4 8-3 |
| 3/4 8-5 | 3/4 8-6 |
| 3/4 8-19 | 3/4 8-20 |

TABLE 3.3-10 (Continued)

ACCIDENT MONITORING INSTRUMENTATION

| INSTRUMENT | TOTAL NO. OF CHANNELS | MINIMUM CHANNELS OPERABLE |
|---|---|---|
| 15. In Core Thermocouples | 4/core quadrant | 2/core quadrant |
| 16. Unit Vent - High-High Range Area Monitor (EMF-54) | N.A. | 1 |
| 17. Steam Relief Valve Exhaust Radiation Monitor (1EMF-26, 27, 28 or 29 and 2EMF-10, 11, 12 or 13) | N.A. | 1 |
| 18. Containment Area - High Range Radiation Monitor (EMF-53 A or B) | N.A. | 1 |
| 19. Reactor Vessel Water Level | 2 | 1 |
| 20. Reactor Coolant Radiation Level (EMF-48) | N.A. | 1 |

TABLE NOTATIONS

* Not applicable if the associated block valve is in the closed position.

** Not applicable if the associated block valve is in the closed position and power is removed.

TABLE 4.3-7

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

| INSTRUMENT | CHANNEL CHECK | CHANNEL CALIBRATION |
|---|---|---|
| 1. Containment Pressure | M | R |
| 2. Reactor Coolant Outlet Temperature - $T_{HOT}$ (Wide Range) | M | R |
| 3. Reactor Coolant Inlet Temperature - $T_{COLD}$ (Wide Range) | M | R |
| 4. Reactor Coolant Pressure - Wide Range | M | R |
| 5. Pressurizer Water Level | M | R |
| 6. Steam Line Pressure | M | R |
| 7. Steam Generator Water Level - Narrow Range | M | R |
| 8. Refueling Water Storage Tank Water Level | M | R |
| 9. Auxiliary Feedwater Flow Rate | M | R |
| 10. Reactor Coolant System Subcooling Margin Monitor | M | R |
| 11. PORV Position Indicator | M | R** |
| 12. PORV Block Valve Position Indicator | M | R** |
| 13. Pressurizer Safety Valve Position Indicator | M | R |
| 14. Containment Sump Water Level (Wide Range) | M | R |

TABLE 4.3-7 (Continued)

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

| INSTRUMENT (Continued) | CHANNEL CHECK | CHANNEL CALIBRATION |
|---|---|---|
| 15. In Core Thermocouples | M | R |
| 16. Unit Vent - High-High Range Area Monitor (EMF-54) | M | R |
| 17. Steam Relief Valve Exhaust Radiation Monitor (1 EMF-26, 27, 28 and 29 and 2 EMF-10, 11, 12 and 13) | M | R |
| 18. Containment Area - High Range Radiation Monitor (EMF-53 A&B) | M | R*,** |
| 19. Reactor Vessel Water Level | M | R |
| 20. Reactor Coolant Radiation Level (EMF-48) | M | R |

*CHANNEL CALIBRATION may consist of an electronic calibration of the channel, not including the detector, for range decades above 10R/h and a one point calibration check of the detector below 10R/h with an installed or portable gamma source.

**This surveillance need not be performed until prior to entering HOT STANDBY following the Unit 1 first refueling. (This applies to Unit 1 only.)

INSTRUMENTATION

CHLORINE DETECTION SYSTEMS

LIMITING CONDITION FOR OPERATION

3.3.3.7 Two independent Chlorine Detection Systems, with their Alarm/Trip Setpoints adjusted to actuate at a chlorine concentration of less than or equal to 5 ppm, shall be OPERABLE.

APPLICABILITY: All MODES.

ACTION:

a. With one Chlorine Detection System inoperable, restore the inoperable system to OPERABLE status within 7 days or within the next 6 hours initiate and maintain operation of the Control Room Area Ventilation System with flow through the HEPA filters and charcoal adsorbers.

b. With both Chlorine Detection Systems inoperable, within 1 hour initiate and maintain operation of the Control Room Area Ventilation System with flow through the HEPA filters and charcoal adsorbers.

c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.7 Each Chlorine Detection System shall be demonstrated OPERABLE by performance of a CHANNEL CHECK at least once per 12 hours, an ANALOG CHANNEL OPERATIONAL TEST at least once per 31 days and a CHANNEL CALIBRATION at least once per 18 months.

INSTRUMENTATION

LOOSE-PART DETECTION SYSTEM

LIMITING CONDITION FOR OPERATION

3.3.3.9 The Loose-Part Detection System shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

a. With one or more Loose-Part Detection System channels inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status.

b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.9 Each channel of the Loose-Part Detection Systems shall be demonstrated OPERABLE by performance of:

a. A CHANNEL CHECK at least once per 24 hours,

b. An ANALOG CHANNEL OPERATIONAL TEST except for verification of Setpoint at least once per 31 days, and

c. A CHANNEL CALIBRATION at least once per 18 months.*

*This surveillance need not be performed until prior to entering STARTUP following the Unit 1 first refueling. (This applies to Unit 1 only.)

INSTRUMENTATION

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.10 The radioactive liquid effluent monitoring instrumentation channels shown in Table 3.3-12 shall be OPERABLE with their Alarm/Trip Setpoints set to ensure that the limits of Specification 3.11.1.1 are not exceeded. The Alarm/Trip Setpoints of these channels shall be determined and adjusted in accordance with the methodology and parameters in the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY: At all times.

ACTION:

a. With a radioactive liquid effluent monitoring instrumentation channel Alarm/Trip Setpoint less conservative than required by the above specification, immediately suspend the release of radioactive liquid effluents monitored by the affected channel, or declare the channel inoperable.

b. With less than the minimum number of radioactive liquid effluent monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.3-12. Restore the inoperable instrumentation to OPERABLE status within the time specified in the ACTION, or explain in the next Semiannual Radioactive Effluent Release Report pursuant to Specification 6.9.1.7 why this inoperability was not corrected within the time specified.

c. The provisions of Specifications 3.0.3, and 3.0.4. are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.10 Each radioactive liquid effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and ANALOG CHANNEL OPERATIONAL TEST operations at the frequencies shown in Table 4.3-8.

INSTRUMENTATION

3/4.3.4 TURBINE OVERSPEED PROTECTION

LIMITING CONDITION FOR OPERATION

3.3.4 At least one Turbine Overspeed Protection System shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

a. With one stop valve or one control valve per high pressure turbine steam line inoperable and/or with one intermediate stop valve or one intercept valve per low pressure turbine steam line inoperable, restore the inoperable valve(s) to OPERABLE status within 72 hours, or close at least one valve in the affected steam line(s) or isolate the turbine from the steam supply within the next 6 hours.

b. With the above required Turbine Overspeed Protection System otherwise inoperable, within 6 hours isolate the turbine from the steam supply.

SURVEILLANCE REQUIREMENTS

4.3.4.1 The provisions of Specification 4.0.4 are not applicable.

4.3.4.2 The above required Turbine Overspeed Protection System shall be demonstrated OPERABLE:

a. At least once per 7 days while in MODE 1 and while in MODE 2 with the turbine operating, by cycling each of the following valves through at least one complete cycle from the running position:

   1) Four high pressure turbine stop valves,
   2) Six low pressure turbine intermediate stop valves, and
   3) Six low pressure turbine intercept valves.

b. At least once per 31 days while in MODE 1 and while in MODE 2 with the turbine operating, by direct observation of the movement of each of the above valves and the four high pressure turbine control valves, through one complete cycle from the running position,

c. At least once per 18 months by performance of a CHANNEL CALIBRATION on the Turbine Overspeed Protection Systems,* and

d. At least once per 40 months by disassembling at least one of each of the above valves (including the four high pressure turbine control valves) and performing a visual and surface inspection of valve seats, disks and stems and verifying no unacceptable flaws or corrosion.

*This surveillance need not be performed until prior to entering HOT STANDBY following the Unit 1 first refueling. (This applies to Unit 1 only.)

## 3/4.4.6 REACTOR COOLANT SYSTEM LEAKAGE

### LEAKAGE DETECTION SYSTEMS

### LIMITING CONDITION FOR OPERATION

3.4.6.1 The following Reactor Coolant System Leakage Detection Systems shall be OPERABLE:

a. The Containment Atmosphere Gaseous Radioactivity Monitoring System,

b. The Containment Floor and Equipment Sump Level and Flow Monitoring Subsystem, and

c. Either the Containment Ventilation Unit Condensate Drain Tank Level Monitoring Subsystem or the Containment Atmosphere Particulate Radioactivity Monitoring System.

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

ACTION:

With only two of the above required Leakage Detection Systems OPERABLE, operation may continue for up to 30 days provided grab samples of the containment atmosphere are obtained and analyzed at least once per 24 hours when the required Gaseous or Particulate Radioactivity Monitoring System is inoperable; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

### SURVEILLANCE REQUIREMENTS

4.4.6.1 The Leakage Detection Systems shall be demonstrated OPERABLE by:

a. Containment Atmosphere Gaseous and Particulate Monitoring System-performance of CHANNEL CHECK, CHANNEL CALIBRATION, and ANALOG CHANNEL OPERATIONAL TEST at the frequencies specified in Table 4.3-3,

b. Containment Floor and Equipment Sump Level and Flow Monitoring Subsystem-performance of CHANNEL CALIBRATION at least once per 18 months,* and

c. Containment Ventilation Unit Condensate Drain Tank Level Monitoring Subsystem-performance of CHANNEL CALIBRATION at least once per 18 months.

*This surveillance need not be performed until prior to entering HOT SHUTDOWN following the Unit 1 first refueling. (This applies to Unit 1 only.)

LIMITING CONDITION FOR OPERATION

3.4.6.2 Reactor Coolant System leakage shall be limited to:

a. No PRESSURE BOUNDARY LEAKAGE,

b. 1 gpm UNIDENTIFIED LEAKAGE,

c. 1 gpm total reactor-to-secondary leakage through all steam generators and 500 gallons per day through any one steam generator,

d. 10 gpm IDENTIFIED LEAKAGE from the Reactor Coolant System,

e. 40 gpm CONTROLLED LEAKAGE at a Reactor Coolant System pressure of 2235 ± 20 psig, and

f. 1 gpm leakage at a Reactor Coolant System pressure of 2235 ± 20 psig from any Reactor Coolant System Pressure Isolation Valve specified in Table 3.4-1.

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

ACTION:

a. With any PRESSURE BOUNDARY LEAKAGE, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With any Reactor Coolant System leakage greater than any one of the above limits, excluding PRESSURE BOUNDARY LEAKAGE and leakage from Reactor Coolant System Pressure Isolation Valves, reduce the leakage rate to within limits within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.*

c. With any Reactor Coolant System Pressure Isolation Valve leakage greater than the above limit, isolate the high pressure portion of the affected system from the low pressure portion within 4 hours by use of at least two closed manual or deactivated automatic valves, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

*Until 0048 hours, October 23, 1985, operation in Modes 3 and 4 is permitted with the Reactor Coolant System unidentified leakage rate > 1 gpm but < 5 gpm. If the unidentified leakage rate is not reduced to < 1 gpm by the above time, the unit will be placed in COLD SHUTDOWN within the following 6 hours.

SURVEILLANCE REQUIREMENTS (Continued)

a. Three Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted at 40 ± 10 month intervals during shutdown at either $P_a$, 14.68 psig, or (Unit 1) at $P_t$, 7.34 psig, during each 10-year service period. The third test of each set shall be conducted during the shutdown for the 10-year plant inservice inspection;

b. If any periodic Type A test fails to meet either 0.75 $L_a$ or (Unit 1) 0.75 $L_t$, the test schedule for subsequent Type A tests shall be reviewed and approved by the Commission. If two consecutive Type A tests fail to meet either 0.75 $L_a$ or (Unit 1) 0.75 $L_t$, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet either 0.75 $L_a$ or (Unit 1) 0.75 $L_t$ at which time the above test schedule may be resumed;

c. The accuracy of each Type A test shall be verified by a supplemental test which:

   1) Confirms the accuracy of the test by verifying that the supplemental test result, $L_c$, minus the sum of the Type A and the superimposed leak, $L_o$, is equal to or less than 0.25 $L_a$ or (Unit 1) 0.25 $L_t$;

   2) Has a duration sufficient to establish accurately the change in leakage rate between the Type A test and the supplemental test; and

   3) Requires that the rate at which gas is injected into the containment or bled from the containment during the supplemental test is between 0.75 $L_a$ and 1.25 $L_a$ or (Unit 1) 0.75 $L_t$ and 1.25 $L_t$.

d. Type B and C tests shall be conducted with gas at a pressure not less than $P_a$, 14.68 psig, at intervals no greater than 24 months* except for tests involving:

   1) Air locks,

   2) Purge supply and exhaust isolation valves with resilient material seals, and

   3) Dual-ply bellows assemblies on containment penetrations between the containment building and the annulus.

*This surveillance need not be performed for those penetrations identified in Table 3.6-1a until prior to entering HOT SHUTDOWN following the Unit 1 first refueling. (This applies to Unit 1 only).

SURVEILLANCE REQUIREMENTS (Continued)

e. The combined bypass leakage rate shall be determined to be less than 0.07 $L_a$ by applicable Type B and C tests at least once per 24 months except[a] for penetrations which are not individually testable; penetrations not individually testable shall be determined to have no detectable leakage when tested with soap bubbles while the containment is pressurized to $P_a$, 14.68 psig, or (Unit 1) $P_t$, 7.34 psig, during each Type A test;

f. Purge supply and exhaust isolation valves with resilient material seals shall be tested and demonstrated OPERABLE by the requirements of Specification 4.6.1.9.3 or 4.6.1.9.4, as applicable;

g. Air locks shall be tested and demonstrated OPERABLE by the requirements of Specification 4.6.1.3;

h. The space between each dual-ply bellows assembly on containment penetrations between the containment building and the annulus shall be vented to the annulus during Type A tests. At least once per 24 months, the space between each dual-ply bellows assembly shall be subjected to a low pressure test at 3 to 5 psig to verify no detectable leakage or the dual-ply bellows assembly shall be subjected to a leak test with the pressure on the containment side of the dual-ply bellows assembly at $P_a$, 14.68 psig, to verify the leakage to be within the limits of Specification 4.6.1.2e.; and

i. The provisions of Specification 4.0.2 are not applicable.

TABLE 3.6-1a

Unit one penetrations (all are test type B and C) that need not be tested until prior to entering HOT SHUTDOWN following the Unit One first refueling.

| PENETRATION NUMBER | SERVICE | RELEASE LOCATION |
|---|---|---|
| M230 | Nuclear Service Water from Reactor Coolant Pump and Lower Containment Ventilation Units. | Auxiliary Building |
| M215 | Breathing Air | Auxiliary Building |
| M219 | Station Air | Auxiliary Building |
| M358 | Refueling Water Pump Suction | Auxiliary Building |
| M356 | Equipment Decontamination Line | Auxiliary Building |
| M345 | Recycle Holdup Tank from Reactor Coolant Drain Tank (Valve 1WL806 only) | Auxiliary Building |
| M204 | Containment Air Addition | Auxiliary Building |
| M259 | Reactor Makeup Water Flush Header | Auxiliary Building |
| E101-450 | Electrical penetrations for various equipment | Auxiliary Building |
| M374 | Containment Floor Sump and Incore Instrumentation Sump Pump Discharge | Auxiliary Building |

SURVEILLANCE REQUIREMENTS (Continued)

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 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 2000 ppm, or

2) That a contained borated water volume of at least 112,320 gallons with minimum boron concentration of 2,000 ppm 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

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.

SURVEILLANCE REQUIREMENTS (Continued)

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.*

*The CHANNEL CALIBRATION requirement of this surveillance need not be performed for level transmitter 1 CFLT5632 until prior to entering HOT STANDBY following the Unit 1 first refueling. (This applies to Unit 1 only.)

SURVEILLANCE REQUIREMENTS (Continued)

2) Verifying the fuel level in the fuel storage tank,

3) Verifying the fuel transfer valve can be operated to allow fuel to be transferred from the storage system to the day tank,

4) Verifying the diesel starts from ambient condition and accelerates to at least 441 rpm in less than or equal to 11 seconds.** The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 11 seconds after the start signal. The diesel generator shall be started for this test by using one of the following signals:

   a) Manual, or

   b) Simulated loss of offsite power by itself, or

   c) Simulated loss of offsite power in conjunction with an ESF Actuation test signal, or

   d) An ESF Actuation test signal by itself.

5) Verifying the generator is synchronized, loaded to greater than or equal to 5600 kW but less than or equal to 5750 kW in less than or equal to 60 seconds, and operates for at least 60 minutes, and

6) Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.

b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from the day tank;

c. At least once per 31 days by checking for and removing accumulated water from the fuel oil storage tanks;

d. By verifying that the Cathodic Protection System is OPERABLE* by verifying:

   1) At least once per 60 days that cathodic protection rectifiers are OPERABLE and have been inspected in accordance with the manufacturer's inspection procedures, and

   2) At least once per 12 months that adequate protection from corrosion is provided in accordance with manufacturer's inspection procedures.

e. By sampling new fuel oil in accordance with ASTM-D4057 prior to addition to storage tanks and:

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*The Cathodic Protection System need not be OPERABLE until after June 1, 1985.

**The diesel generator start (11 sec.) from ambient conditions shall be performed at least once per 184 days in these surveillance tests. All other engine starts for the purpose of this surveillance testing may be preceded by an engine prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical stress and wear on the diesel engine is minimized.

SURVEILLANCE REQUIREMENTS (Continued)

1) By verifying in accordance with the tests specified in ASTM-D975-81 prior to addition to the storage tanks that the sample has:

   a) An API Gravity of within 0.3 degrees at 60°F, or a specific gravity of within 0.0016 at 60/60°F, when compared to the supplier's certificate, or an absolute specific gravity at 60/60°F of greater than or equal to 0.83 but less than or equal to 0.89, or an API gravity of greater than or equal to 27 degrees but less than or equal to 39 degrees;

   b) A kinematic viscosity at 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes (alternatively, Saybolt viscosity, SUS at 100°F of greater than or equal to 32.6, but less than or equal to 40.1), if gravity was not determined by comparison with the supplier's certification;

   c) A flash point equal to or greater than 125°F; and

   d) A clear and bright appearance with proper color when tested in accordance with ASTM-D4176-82.

2) By verifying within 30 days of obtaining the sample that the other properties specified in Table 1 of ASTM-D975-81 are met when tested in accordance with ASTM-D975-81 except that the analysis for sulfur may be performed in accordance with ASTM-D1552-79 or ASTM-D2622-82.

f. At least once every 31 days by obtaining a sample of fuel oil in accordance with ASTM-D2276-78, and verifying that total particulate contamination is less than 10 mg/liter when checked in accordance with ASTM-D2276-78, Method A;

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

1) Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service;*

2) Verifying the generator capability to reject a load of greater than or equal to 825 kW while maintaining voltage at 4160 $\pm$ 420 volts and frequency at 60 $\pm$ 1.2 Hz;

3) Verifying the generator capability to reject a load of greater than or equal to 5600 kW but less than or equal to 5750 kW without tripping. The generator speed shall not exceed 500 rpm during and following the load rejection;

4) Simulating a loss-of-offsite power by itself,** and:

*This surveillance need not be performed until prior to entering HOT SHUTDOWN following the Unit 1 first refueling. (This applies to Unit 1 only.)

**This surveillance need not be performed until prior to entering HOT SHUTDOWN following the Unit 1 first refueling.

SURVEILLANCE REQUIREMENTS (Continued)

a) Verifying deenergization of the emergency busses and load shedding from the emergency busses, and

b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 11 seconds, energizes the auto-connected emergency (accident) loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test.

5) Verifying that on an ESF Actuation test signal, without loss-of-offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be at 4160 ± 420 volts and 60 ± 1.2 Hz within 11 seconds after the auto-start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test;

6) Simulating a loss-of-offsite power in conjunction with an ESF Actuation test signal, and

a) Verifying deenergization of the emergency busses and load shedding from the emergency busses;**

b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 11 seconds, energizes the auto-connected emergency (accident) loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test;** and

c) Verifying that all automatic diesel generator trips, except engine overspeed, low-low lube oil pressure, generator differential, and the 2 out of 3 voltage controlled overcurrent relay scheme, are automatically bypassed upon loss of voltage on the emergency bus concurrent with a Safety Injection Actuation signal.

7) Verifying the diesel generator operates for at least 24 hours. The diesel generator shall be loaded to greater than or equal to 5600 kW but less than or equal to 5750 kW. The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 11 seconds after the start signal; the steady-state generator voltage and frequency shall be maintained within these limits

**This surveillance need not be performed until prior to entering HOT SHUTDOWN following the Unit 1 first refueling.

during this test. Within 5 minutes after completing this 24-hour test, perform Specification 4.8.1.1.2g.6)b);* **

8) Verifying that the auto-connected loads to each diesel generator do not exceed 5750 kW;**

9) Verifying the diesel generator's capability to:**

   a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,

   b) Transfer its loads to the offsite power source, and

   c) Be restored to its standby status.

10) Verifying that with the diesel generator operating in a test mode, connected to its bus, a simulated Safety Injection signal overrides the test mode by: (1) returning the diesel generator to standby operation, and (2) automatically energizing the emergency loads with offsite power;**

11) Verifying that the fuel transfer valve transfers fuel from each fuel storage tank to the day tank of each diesel via the installed cross-connection lines;

12) Verifying that the automatic load sequence timer is OPERABLE with the interval between each load block within the tolerances given in Table 4.8-2;

13) Verifying that the voltage and diesel speed tolerances for the accelerated sequencer permissives are 92.5 ± 1% and 98 + 1%, respectively, with a minimum time delay of 2 ± 0.2 s; and

14) Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:

   a) Turning gear engaged, or

   b) Maintenance mode.

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*If Specification 4.8.1.1.2g.6)b) is not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the diesel generator may be operated at greater than or equal to 5600 kW but less than or equal to 5750 kW for 1 hour or until operating temperature has stabilized.

**This surveillance need not be performed until prior to entering HOT SHUTDOWN following the Unit 1 first refueling.

## 3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

### CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

### LIMITING CONDITION FOR OPERATION

3.8.4 All containment penetration conductor overcurrent protective devices given in Tables 3.8-1a and 3.8-1b shall be OPERABLE.

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

ACTION:

With one or more of the containment penetration conductor overcurrent protective device(s) given in Tables 3.8-1a and 3.8-1b inoperable:

a. Restore the protective device(s) to OPERABLE status or de-energize the circuit(s) by tripping the associated backup circuit breaker or racking out or removing the inoperable circuit breaker within 72 hours, declare the affected system or component inoperable, and verify the backup circuit breaker to be tripped or the inoperable circuit breaker racked out or removed at least once per 7 days thereafter; the provisions of Specification 3.0.4 are not applicable to overcurrent devices in circuits which have their backup circuit breakers tripped, their inoperable circuit breakers racked out, or removed, or

b. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

### SURVEILLANCE REQUIREMENTS

4.8.4 All containment penetration conductor overcurrent protective devices given in Tables 3.8-1a and 3.8-1b shall be demonstrated OPERABLE:

a. At least once per 18 months*:

1) By verifying that the medium voltage (4-15 kV) circuit breakers are OPERABLE by selecting, on a rotating basis, at least 10% of the circuit breakers of each voltage level, and performing the following:

a) A CHANNEL CALIBRATION of the associated protective relays,

b) An integrated protective system functional test which includes simulated automatic actuation of the system and verifying that each relay and associated circuit breakers function as designed, and

*This surveillance need not be performed until prior to entering HOT SHUTDOWN following the Unit 1 first refueling. (This applies to Unit 1 only.)

SURVEILLANCE REQUIREMENTS (Continued)

c) For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.

2) By selecting and functionally testing a representative sample of at least 10% of each type of lower voltage circuit breakers. Circuit breakers selected for functional testing shall be selected on a rotating basis. Testing of these circuit breakers shall consist of injecting a current in excess of the breakers nominal Setpoint and measuring the response time. The measured response time will be compared to the manufacturer's data to ensure that it is less than or equal to a value specified by the manufacturer. Circuit breakers found inoperable during functional testing shall be restored to OPERABLE status prior to resuming operation. For each circuit breaker found inoperable during these functional tests, an additional representative sample of a least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested; and

3) By selecting and functionally testing a representative sample of each type of fuse on a rotating basis. Each representative sample of fuses shall include at least 10% of all fuses of that type. The functional test shall consist of a nondestructive resistance measurement test which demonstrates that the fuse meets its manufacturer's design criteria. Fuses found inoperable during these functional tests shall be replaced with OPERABLE fuses prior to resuming operation. For each fuse found inoperable during these functional tests, an additional representative sample of at least 10% of all fuses of that type shall be functionally tested until no more failures are found or all fuses of that type have been functionally tested.

b. At least once per 60 months by subjecting each circuit breaker to an inspection and preventive maintenance in accordance with procedures prepared in conjunction with its manufacturer's recommendations.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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| In the Matter of | ) | |
| | ) | |
| Duke Power Company | ) | Docket No. 50-413 |
| | ) | |
| North Carolina Electric Membership Corporation | ) | |
| | ) | |
| Saluda River Electric Cooperative, Inc. | ) | |
| | ) | |
| (Catawba Nuclear Station, Unit 1) | ) | |

EXEMPTION

I.

Duke Power Company, North Carolina Electric Membership Corporation, and Saluda River Electric Cooperative, Inc. (the licensees) are the holders of Facility Operating License No. NPF-35, issued January 17, 1985, which authorizes full power operation of the Catawba Nuclear Station, Unit 1 (the facility) at steady-state reactor power levels not in excess of 3411 megawatts thermal. The facility consists of a pressurized water reactor located in York County, South Carolina.

II.

Sections III.D.2 and III.D.3 of Appendix J to 10 CFR Part 50 require that Type B containemnt penetration electrical and mechanical tests and Type C containment isolation valve tests be performed during each reactor shutdown for refueling but in no case at intervals greater than 2 years. The above regulation would have required the performance of the above Type B and C tests between August 19 and August 22, 1986, for the affected penetrations and valves.

III.

By letters dated May 5 and 9, 1986, and June 13, 1986, the licensees requested an exemption from the requirements of Sections III.D.2 and III.D.3 of Appendix J to 10 CFR 50 which would defer, by about six weeks (until September 28, 1986), the performance of Type B tests on all 91 containment electrical penetrations and 9 containment mechanical penetrations, and Type C tests on 14 containment isolation valves. The basis for the exemption is that the extension would allow the licensees to take the station off line at a time consistent with system need for power rather than forcing a station shutdown in August when the distribution system's need for power is high due to the planned outage of other system power plants.

The NRC staff has reviewed the licensees' request for the extension until September 28, 1986. The extension is for a short period, i.e. six weeks. All these tests have yielded successful results when they were performed in the August 19 to 22, 1984, time frame. This facility was issued a low power license on December 6, 1984, and a full power license on January 17, 1985. Thus, these penetrations and valves will, with the proposed extension, have been exposed to their operating environment for no more than 22 months compared to the nominal two year surveillance interval permitted by Appendix J. Therefore, the staff finds that the increased probability of containment leakage associated with the proposed extension is insignificant and that no measurable impact would result from the proposed extension. For the above reasons, the staff finds that the requested exemption is acceptable.

IV.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a)(1) this temporary exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security.

The Commission has determined that the special circumstances necessary to support an exemption, described in 10 CFR 50.12(a)(2)(ii), (a)(2)(iii), and (a)(2)(v) apply to this situation. Application of the Appendix J requirement in this situation for testing at refueling outage or within two years, would not serve the underlying purpose of the regulation, which is to assure testing after every two years of full power operation. Since Unit 1 has not operated at full power for the two years of Cycle 1 due to the testing required by the startup program, the extension of time granted herein does not conflict with the intent of the rule and defers the testing requirement intended by Appendix J to the first refueling outage when Unit 1 will have completed a full power cycle. This complies with the intent of the regulation and comports with the special circumstance described in 10 CFR 50.12(a)(2)(ii). Additionally, a requirement for shutdown to comply with the two year testing requirement in Appendix J would impose a hardship and costs not contemplated by the rule when written since Appendix J clearly indicates an intent that required testing be performed during normal refueling outages except in unusual situations when the two year limit would apply. To require shutdown to comply with the two year limit for testing even though the plant has not accumulated two full power years of operation would result in an unnecessary loss of power to the grid at a time when other plants in the system are scheduled for outages as well as the extra costs attendant to two successive outages, rather than one.

Requiring two outages simply to meet the time limit in Appendix J without acknowledgment of the time of full power operation would create the hardship and excess costs not considered by the regulation as described in 10 CFR 50.12(a)(2)(iii). Finally, the exemption requested is a temporary one which will exist only for about six weeks and which became necessary only because of the delay in full power operation common to initial startup. This request does not result from any negligence on the part of the licensee, who has committed to perform Appendix J testing in the event an unscheduled outage occurs prior to refueling outage for Unit 1. This situation constitutes the special circumstances described in 10 CFR 50.12(a)(2)(v).

Accordingly, the Commission hereby grants a temporary exemption as described in Section III above from Sections III.D.2 and III.D.3 of Appendix J of 10 CFR 50 to defer, by six weeks, the performance of Type B and C tests for the containment penetrations and isolation valves described above.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this Exemption will have no signficant impact on the environment ( 51 FR ).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Lester S. Rubenstein, Acting Director
Division of PWR Licensing-A
Office of Nuclear Reactor Regulation

G. BAGCHI/EB/PWR-A 7/3/86
07/3/86

Dated at Bethesda, Maryland
this day of

* SEE PREVIOUS CONCURRENCE

| PWR#4/DPWR-A | PWR#4/DPWR-A | OELD | PWR#4/DPWR-A | AD/DPWR-A |
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| KJabbour/mac | MDuncan | *CWoodhead | BJYoungblood | LRubenstein |
| 06/ /86 | 06/ /86 | 06/26/86 | 06/3 /86 | 06/3 /86 |

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# RELATED TO AMENDMENT NO. 8 TO FACILITY OPERATING LICENSE NPF-35

# AMENDMENT NO. 1 TO FACILITY OPERATING LICENSE NPF-52

# CATAWBA NUCLEAR STATION, UNITS 1 AND 2

# DOCKET NOS. 50-413 AND 50-414

# DUKE POWER COMPANY, ET AL.

## INTRODUCTION

By letters dated May 5, 1986, Duke Power Company, et al., (the licensee) proposed changes to the Technical Specifications (TS) for Catawba Nuclear Station, Unit 1, which would extend, on a one-time basis, by a maximum of three months until the first refueling outage (currently scheduled for late August but no later than September 28, 1986) certain 18-month and 24-month TS surveillances; and by a maximum of four months, until prior to entering HOT SHUTDOWN (Mode 4) following the Unit 1 first refueling (currently scheduled prior to December 15, 1986), the inspection of each diesel generator (DG). The additional extension of the DG inspection interval is required because one DG is required to be operable in COLD SHUTDOWN (Mode 5) or REFUELING (Mode 6), and therefore the inspection of both DGs cannot be conducted concurrently. The above surveillances and inspections can only be conducted with Unit 1 in COLD SHUTDOWN or REFUELING.

Normally, since refueling outages occur about every 18 months, extension beyond the 18-month and 24-month surveillance intervals required by the Technical Specifications is usually not necessary. However, due to the extended length of Unit 1 startup program and cycle 1, the licensee must either request an extension or be forced to shutdown prior to the first refueling outage. The information submitted by the licensee's letters dated May 5 and 9, 1986, and June 13, 1986, regarding the exemption request for Catawba Unit 1 was also used by the NRC staff for its review of the licensee's request for TS changes. Although amendments will be issued for both Units 1 and 2, changes are proposed for Unit 1 only. Unit 2 is included only because the Technical Specifications are combined in one document for both units. The changes would be accomplished by adding a footnote usually stating that this surveillance need not be performed until prior to entering HOT SHUTDOWN, HOT STANDBY or STARTUP, as applicable, following the Unit 1 first refueling outage, and clarifying that the footnote (i.e., the extension) applies to Unit 1 only. The footnote would be added to the Surveillance Requirements for the following tests:

1. Position indicators for the Power-Operated Relief Valves (PORVs) and Associated Block Valves - TS Table 4.3-7, Items 11 and 12. Channel calibration would be extended from July 24, 1986, and would be performed prior to entering HOT STANDBY following first refueling.

2. Containment Area High Range Radiation Monitor TS Table 4.3-7, Item 18. Channel calibration would be extended from August 25, 1986, and would be performed prior to entering HOT STANDBY following first refueling.

3. Loose-Parts Detection Systems - TS 4.3.3.9c. Channel calibration would be extended from August 14, 1986, and would be performed prior to entering STARTUP following first refueling.

4. Turbine Overspeed Protection System - TS 4.3.4.2c. Channel calibration would be extended from August 19, 1986, and would be performed prior to entering HOT STANDBY following first refueling.

5. Reactor Coolant Leakage Detection Systems - TS 4.4.6.1b. Channel calibration of containment floor and equipment sump level and flow monitoring subsystem would be extended from August 9, 1986, and would be performed prior to entering HOT SHUTDOWN following first refueling.

6. Type B and C Tests for Containment Penetrations and Isolation Valves respectively - TS 4.6.1.2d. Local (Type B and C) leak testing of those penetrations and valves identified in a new Table 3.6-1a would be extended from the present range of August 19, 1986, through August 22, 1986, and would be performed prior to entering HOT SHUTDOWN following first refueling. The penetration designations (and their associated services) identified in new Table 3.6-1a would be: M230 (nuclear service water from reactor coolant pump and lower containment ventilation units), M215 (breathing air), M219 (station air), M358 (refueling water pump section), M356 (equipment decontamination line), M345 (recycle holdup tank from reactor coolant drain tank - valve 1WL806 only), M204 (containment air addition), M259 (reactor makeup water flush header), E101 through 450 (electrical penetrations for various equipment), and M374 (containment floor sump and incore instrumentation sump pumps discharge). This extension was also the subject of a partial exemption from 10 CFR 50, Appendix J, pursuant to 10 CFR 50.12(a).

7. Steam Generator Level Transmitter 1CFLT 5632, TS 4.7.13.6. Channel calibration of this transmitter would be extended from July 2, 1986, and would be performed prior to entering HOT STANDBY following first refueling.

8. Diesel Generator (DG), TS 4.8.1.1.2g.1). The inspection, based upon the DG manufacturer's recommendations, would be extended from July 3, 1986 (for DG 1A) and August 15, 1986 (for DG 1B) and would be performed prior to entering HOT SHUTDOWN following first refueling.

9. Containment Penetration Conductor Overcurrent Protective Devices, TS 4.8.4a. Channel calibration and various functional tests for the devices identified in TS Table 3.8-1A would be extended from August 2, 1986 and would be performed prior to entering HOT SHUTDOWN following first refueling.

EVALUATION

1. The extension of the 18-month channel calibration interval for the primary system PORV and PORV block valve position indicators (TS Table 4.3-7, Items 11 and 12) is for a relatively brief period (slightly over 2 months). These indicators are designed, installed and maintained to standards which assure high

reliability, and operating experience to date has been most favorable. Other surveillances not changed by the proposed amendments require periodic operation of the PORV (TS 4.4.4.1b.) and their block valves (TS 4.4.4.2) through one complete cycle of full travel, and thus ensure continued operability of these valves. This change does not alter any design bases, safety limits, limiting safety system settings, or limiting conditions for operation. Therefore, the staff finds this change acceptable.

2. The extension of the 18-month channel calibration interval for the Containment Area High Range Radiation Monitor (TS Table 4.3-7, Item 18) is for a brief period (slightly over one month). The monitor is a reliable radiation instrument whose purpose is to detect high levels of radiation which might be released during an accident. Monthly channel checks required by TS Table 4.3-7 will not be altered by the proposed amendments and these checks ensure the monitor's continued operability. Therefore, the staff finds this change acceptable.

3. The extension of the 18-month channel calibration interval for the Loose-Parts Detection System (TS 4.3.3.9c.) is for a brief period (about 1½ months). Other TS surveillance requirements for daily channel checks and monthly analog channel operational tests, plus system capability of overlap testing of the circuits, will not be changed by the proposed amendments and these requirements will ensure continued operability of the system. Therefore, the staff finds this change acceptable.

4. The extension of the 18-month channel calibration interval for the Turbine Overspeed Protection System (TS 4.3.4.2c.) is for a brief period (about 1½ months). Other TS surveillance requirements for weekly cycling of the high pressure turbine intermediate stop valves and low pressure turbine intercept valves, and for monthly cycling of the high pressure turbine control valves, would not be changed by the proposed amendments and will ensure continued operability of the system. Thus, the staff finds this change acceptable.

5. The extension of the 18-month channel calibration interval for the containment floor and equipment sump level and flow monitoring subsystem of the Reactor Coolant Leakage Detection Systems (TS 4.4.6.1b.) is for a brief period (less than 2 months). Other TS surveillance requirements with respect to the containment atmosphere gaseous and particulate monitoring system and the containment ventilation unit condensate drain tank level monitoring subsystem would not be changed by the proposed amendments and assure adequate capability to monitor reactor coolant system leakage. Therefore, the staff finds this change acceptable.

6. The extension of the 24-month surveillance interval associated with Type B Leak Rate Tests on all 91 containment electrical penetrations and 9 containment mechanical penetrations, and Type C Leak Rate Tests on 14 containment isolation valves (TS 4.6.1.2d.) is for a short period (six weeks). These penetrations and valves all yielded successful test results when they were tested in the August 19 to 22, 1984, time frame. This facility (i.e. Catawba Unit 1) was issued a low power license on December 6, 1984, and a full power license on January 17, 1985. Thus, these penetrations and valves will, with the proposed extension, have been exposed to their operating environment for no more than 22 months compared to the nominal two year surveillance interval permitted by Appendix J.

Accordingly, the staff finds that the increased probability of containment leakage associated with the proposed extension is insignficant and that no measurable impact would result from the proposed extension. For the above reasons, the staff finds that the requested extension is acceptable. This extension request also requires a partial, one-time exemption from Sections III.D.2 and III.D.3 of Appendix J to 10 CFR 50. Such exemption has been granted by the Commission for Catawba Unit 1 based upon the licensee's exemption request submitted by letters dated May 5 and 9, 1986, and June 13, 1986.

7. The extension of the 18-month channel calibration interval for the Steam Generator Level Transmitter 1CFLT 5632 (TS 4.7.13.6) is for a brief period (about 3 months). This instrument provides indication at the Standby Shutdown Facility of Steam Generator "C" wide range level. This is a non-safety related instrument which provides Control Room indication but has no actuation capability. The extension of the surveillance interval for channel calibration would apply only to this single transmitter; the other three level transmitters (one per steam generator) would continue to be calibrated as presently required. The proposed amendments would not change existing TS requirements for monthly channel checks for all four level transmitters. The proposed amendments with respect to this transmitter would not change any design bases, safety limits, limiting safety sytem setpoints or limiting conditions for operation. Therefore, the staff finds this change acceptable.

8. The extension of each DG inspection interval, TS 4.8.1.1.2g.1), is for a maximum of four months. The inspection involves the disassembly of the diesel and normally requires up to 30 days to perform. Since one DG is required to be operable in COLD SHUTDOWN (Mode 5) or REFUELING (Mode 6), the inspections must be performed one at a time. During this time period, one diesel would remain operable and the appropriate surveillances would be conducted to assure its operability. Extensive inspections were performed on each diesel prior to Unit 1 startup (see SSER 4). All other required surveillances would continue to be performed (with the exception of those related to the ESF actuation surveillance interval extension previously granted by Amendment No. 7 issued on April 24, 1986) and will provide assurance of continued diesel generator operability. The proposed amendments to extend this DG inspection interval would not change any design bases, safety limits, limiting safety system setpoints or limiting conditions for operation. Therefore, the staff finds this change acceptable.

9. The extension of the 18-month surveillance interval for the Containment Penetration Conductor Overcurrent Protective Devices (TS 4.8.4a) is for a relatively brief period (about 2 months). This surveillance is associated with channel calibration of certain protective relays and functional testing of a 10% sample of circuit breakers and fuses listed in TS Table 3.8-1A. The licensee reports that the breakers and fuses have been highly reliable with no failures or actuations recorded to date. The proposed amendments with respect to these devices would not change any design bases, safety limits, limiting safety system setpoints or limiting conditions for operation. Therefore, the staff finds this change acceptable.

Based on the above evaluations, the staff finds that the licensee's proposed one-time extension of the surveillance intervals for the tests listed above would not pose an undue risk to public health and safety.

ENVIRONMENTAL CONSIDERATION

The amendments involve a change in use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there have been no public comments on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments. An environmental assessment and finding of no significant impact concerning the exemption from Appendix J was published in the Federal Register on June 25, 1986 (51 FR 23171).

CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (51 FR 18705) on May 21, 1986, and consulted with the state of South Carolina. No public comments were received, and the state of South Carolina did not have any comments.

We have concluded, based on the considerations discussed above, that : (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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