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DUKE POWER

March 9, 1992

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Subject: Catawba Nuclear Station  
Docket No. 50-413, -414  
Selected Licensee Commitments Manual (SLC)

Gentlemen:

Pursuant to 10 CFR 50.4 and 50.71, please find attached 10 copies of the latest revisions to the Catawba Selected Licensee Commitments Manual. The SLC Manual is Chapter 16.0 to the Catawba FSAR. This manual is meant to contain commitments and other station issues that we believe warrant higher control, but are not appropriate in the Technical Specifications (TS). Instead of being updated with the annual FSAR Update, the SLC Manual will be updated monthly as needed during the year.

Very truly yours,

M.S. Tuckman

HAF/laf  
Attachment

xc: S. D. Ebnetter  
Regional Administrator, Region II

R. E. Martin, ONRR

W. T. Orders, Catawba  
Senior Resident Inspector

9203240235 920309  
PDR ADOCK 05000413  
P FDR

A053  
11

Duke Power Company  
Wachovia Center  
P.O. Box 1007  
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DUKE POWER

March 5, 1992

Re: Catawba Nuclear Station  
Selected Licensee Commitments

Attached are revisions to the Catawba Nuclear Station Selected Licensee Commitment (SLC) Manual. This attachment consists of: recently approved revisions to SLC 16.9-5, typographically corrected pages from SLCs 16.5-1 and 16.9-5, and the last page of SLC 16.9-5 which was inadvertently omitted in the last revision.

Your manual should be updated as follows:

Replace These pages

LOEP 1,2,3  
16.9-14b  
16.9-15, 16, 17  
16.5-1, 2, 3

Insert These Pages

LOEP 1,2,3  
16.9-14b, 15.9-14e  
16.9-15, 16, 17  
16.5-1, 2, 3

Any questions should be directed to me at 704-373-2365.

*Laura Burba*

Laura Burba  
Nuclear Licensing Services

Attachment

DUKE POWER COMPANY  
 CATAWBA NUCLEAR STATION  
 SELECTED LICENSEE COMMITMENTS  
 MANUAL  
 LIST OF EFFECTIVE PAGES

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CATAWBA NUCLEAR STATION

COMMITTED FIRE DOORS

Door No.	Location
<u>Elevation 522+0</u>	
AX500F	56, FF
<u>Elevation 543+0</u>	
AX202	50-51, NU
AX214A	54-55, FF-GG
AX214B	58-59, FF-GG
AX217D	52-53, BB
AX217F	51, AA-BB
AX217G	52-53, BB
AX227D	54-55, MM-NN
AX227E	59-60, MM-NN
AX227F	59, FF-GG
AX228A	56-57, EE
AX228B	57-58, EE
AX248	57-58, QQ
AX253A	63-64, NN
AX260B	61-62, BB-CC
AX260E	52, CC
AX260F	62, AA-BB
AX260G	61-62, BB-CC
AX260H	61-62, BB-CC
AX516M	62, CC
T527#1	52-43, BB-CC
<u>Elevation 554+0</u>	
AX354A	55, DD-EE
AX354B	59, DD-EE
AX418	57, BB
AX419	57, DD-EE
AX420A	59, DD-EE
AX421A	55, DD-EE
S102A	53-54, AA
<u>Elevation 556+0</u>	
AX302	41, CC-DD
AX304	41, AA-BB
AX306	73, DD-EE
AX308	73, BB-CC

Elevation 605+0

AX700B	50-51, JJ-KK
AX700D	63-64, KK
AX701	50-51, JJ-KK
AX714B	63-64, JJ-KK
AX714C	50-51, JJ-KK
AX720	50-51, HH-JJ
AX721	63-64, HH-JJ
AX715A	63-64, JJ-KK

Nuclear Service Water Pump Structure

AX662A

Elevation 609+0

S1114	QA Vault
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16.5 REACTOR COOLANT SYSTEM

MID-LOOP OPERATION WITH IRRADIATED FUEL IN THE CORE

16.5-1

COMMITMENT

Operations with Reactor Coolant (NC) system level less than or equal to 16 $\frac{1}{2}$  with fuel in the core shall be conducted under the following conditions:

- 1) At least one hot leg will be maintained with no S/G nozzle dam installed until the reactor vessel head has been removed.
- 2) If S/G nozzle dams are to be used, one hot leg dam and a hot or cold leg manway on the associated S/G shall remain out anytime the reactor vessel head is in place. If a cold leg manway is being used, then all cold leg nozzle dams must be installed.
- 3) Two independent trains of NC level instruments are required. These instruments shall have independent transmitters and shall not include the NC System sightglass (NCLG-6450) or tygon tubing.
- 4) Two core exit thermocouples shall be maintained operating with temporary high alarms set at 140 F and monitored except as noted below:
  - \* Final disconnection of the last two core exit thermocouples shall occur no sooner than two hours prior to reactor vessel head removal.
  - \* Reconnection of at least two thermocouples within two hours after reinstalling the reactor vessel head.
  - \* The total time without thermocouple indication shall not exceed 12 hours.
- 5) Three power sources shall be available as follows:
  - \* Two off-site power sources and one D/G, or
  - \* One off-site power source and two D/Gs.
- 6) Two independent makeup paths of borated water shall be available, during each of the following conditions:
  - a) Reactor Coolant System intact:
    - \* One Centrifugal Charging Pump (NV) as required per Technical Specifications 3.1.2.1 and 3.1.2.3.



- \* One Safety Injection Pump (NI) having its breaker installed in its associated cubicle and a flow path available from the FWST to the NC System.
- b) Reactor Coolant System open to Containment atmosphere via a hot leg vent path:
- \* One Centrifugal Charging Pump (NV) as required per Technical Specifications 3.1.2.1 and 3.1.2.3.
  - \* One of the following gravity flowpaths:
    - \* FWST through ND-33 to the cold legs via NI-173A and/or NI-178B.
    - \* FWST through the ND suction lines to the hotlegs.
    - \* FWST through ND-33 to the hotlegs via NI-183B.

NOTE: The number of open containment penetrations is limited such that the penetrations can be closed within two hours of losing ND.

- 7) Containment Closure must be established. Containment Closure is verified by the performance of PT/1/(2)/A/4200/02C-I, Containment Closure Verification, with penetrations not verified acceptable administratively controlled per OP/0 O/A/6100/14, Penetration Control During Modes 5 and 6.
- 8) The reactor has been subcritical for at least 7 days; or Design Engineering has provided a required subcritical time based on plant operating history and actual reduced NCS level.

#### APPLICABILITY:

Whenever irradiated fuel is in the reactor vessel and NC System wide range level is less than or equal to 16%.

#### REMEDIAL ACTION:

If any of the above commitments cannot be met during the time that the reactor vessel is in a reduced inventory condition, take immediate corrective actions to bring the plant into compliance with the COMMITMENT and contact the Station Manager and/or responsible Group Superintendent for additional guidance.

#### TESTING REQUIREMENTS:

None

#### REFERENCES:

- 1) Generic Letter 88-17 (Loss of Decay Heat Removal)

- 2) NUREG 1410 (Loss of Vital AC Power and Residual Heat Removal during Mid-Loop Operation at Vogtle)
- 3) Catawba Nuclear Station Directive 3.1.30 (Mid-Loop Operation)
- 4) OP/1(2)/A/6150/06 (Draining the Reactor Coolant System)
- 5) Catawba Nuclear Station Technical Specifications
- 6) Catawba Nuclear Station Technical Specification Interpretations
- 7) Oconee Nuclear Station Selected Licensee Commitment 16.5.3
- 8) Integrated Scheduling Management Procedure 3.1 (Outage Planning and Execution Responsibilities)
- 9) Catawba Nuclear Station responses to Generic Letter 88-17 dated January 3, 1989

BASES:

Generic Letter 88-17 and NUREG 1410 involve concerns associated with a loss of Residual Heat Removal during NC System reduced inventory. Numerous events have occurred in the industry that resulted in a loss of residual heat removal during reduced inventory operation. This is of great concern due to the potential for substantial core damage occurring in a relatively short time period. This Selected Licensee Commitment depicts those commitments which are extremely important to nuclear safety, however, are not presently covered by Technical Specifications.

FIRE PROTECTION SYSTEMS

## 16.9-6 FIRE DETECTION INSTRUMENTATION

COMMITMENT

As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 16.9-3 shall be OPERABLE.

APPLICABILITY:

Whenever equipment protected by the fire detection instrument is required to be OPERABLE.

REMEDIAL ACTION:

- a. With any, but not more than one-half the total in any fire zone, Function A fire detection instruments shown in Table 16.9-3 inoperable, restore the inoperable instrument(s) to OPERABLE status within 14 days or within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5.
- b. With more than one-half of the Function A fire detection instruments in any fire zone shown in Table 16.9-3 inoperable, or with any Function B fire detection instruments shown in Table 16.9-3 inoperable, or with any two or more adjacent fire detection instruments shown in Table 16.9-3 inoperable, within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5.

TESTING REQUIREMENTS:

- a. Each of the above required flame detection instruments shall be demonstrated OPERABLE at least once per 6 months by performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST.

Each of the above required smoke detection instruments which are accessible during plant operation shall be demonstrated OPERABLE at least once per 6 months by the performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST. Detectors which are not accessible during plant operation shall be demonstrated

operable by the performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST during each refueling outage.

All spot type heat detectors which are accessible during plant operation shall be VISUALLY INSPECTED at least once per 6 months.

Each of the above required heat detection instruments shall be demonstrated OPERABLE as follows:

- i. For nonrestorable spot-type detectors, at least two detectors out of every hundred, or fraction thereof, shall be removed every 5 years and functionally tested. For each failure that occurs on the detectors removed, two additional detectors shall be removed and tested; and
  - ii. For restorable spot-type heat detectors which are accessible during plant operation, at least one detector on each signal initiating circuit shall be demonstrated OPERABLE at least once per 6 months by performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST. Different detectors shall be selected for each test. Fire detectors which are not accessible during plant operation shall be demonstrated OPERABLE by the performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST during each refueling outage.
- b. The NFPA Standard 72D supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months.

#### REFERENCES:

- 1) Catawba FSAR, Section 9.5.1
- 2) Catawba SER, Section 9.5.1
- 3) Catawba SER, Supplement 2, Section 9.5.1
- 4) Catawba SER, Supplement 3, Section 9.5.1
- 5) Catawba Fire Protection Review, as Revised
- 6) Catawba Fire Protection Commitment Index

BASES:

OPERABILITY of the detection instrumentation ensures that both adequate warning capability is available for prompt detection of fires and that Fire Suppression Systems, that are actuated by fire detectors, will discharge extinguishing agents in a timely manner. Prompt detection and suppression of fires will reduce the potential for damage to safety-related equipment and is an integral element in the overall facility Fire Protection Program.

Fire detectors that are used to actuate Fire Suppression Systems represent a more critically important component of a plant's Fire Protection Program than detectors that are installed solely for early fire warning and notification. Consequently, the minimum number of OPERABLE fire detectors must be greater.

The loss of detection capability for Fire Suppression Systems, actuated by fire detectors, represents a significant degradation of fire protection for any area. As a result, the establishment of a fire watch patrol must be initiated at an earlier stage than would be warranted for the loss of detectors that provide only early fire warning. The establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.