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**DUKE POWER**

April 8, 1993

U. S. Nuclear Regulatory Commission  
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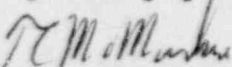
Subject: McGuire Nuclear Station  
Docket Nos. 50-369, -370  
Selected Licensee Commitments Manual (SLC)  
Reference: 10CFR 50.4 and 50.71

Gentlemen:

Attached are seven copies of the latest revisions to the McGuire Selected Licensee Commitment (SLC) Manual. The SLC Manual is Chapter 16.0 of the McGuire FSAR. This manual contains commitments and other station issues that warrant control, but are not appropriate for Technical Specifications (TS). The SLC Manual is updated as needed during the year.

For questions concerning this revision, please contact Larry Kunka at (704) 875-4032.

Very truly yours,

  
T. C. McMeekin

cc: (with attachments)

Mr. T. A. Reed, ONRR

Mr. S. D. Ebnetter  
Regional Administrator, Region II

Mr. P. K. VanDoorn, McGuire  
Senior Resident Inspector

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16.5 REACTOR COOLANT SYSTEM

REDUCED INVENTORY OPERATION WITH IRRADIATED FUEL IN CORE

16.5-1 INVENTORY CONTROL

COMMITMENT

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Prior to reducing the Reactor Coolant System (NC) level to less than 60" Wide Range NC system level, the following conditions shall be met:

- a. If steam generator (S/G) nozzle dams are in use, at least one hot leg vent path shall remain open whenever the reactor vessel head is in place. The vent path may be satisfied by no hot leg nozzle dam installed and removal of either: 1. hot leg diaphragm and manway or 2. cold leg diaphragm and manway in the vented loop.
- b. If the reactor coolant system cold leg side is to be opened with total openings of one square inch or greater, a hot leg vent path shall be provided. The vent path may be satisfied by the removal of either 1. hot leg S/G manway and diaphragm (no hot leg nozzle dam) or 2. no hot leg nozzle dam and cold leg manway and diaphragm in the same steam generator or by the removal of the reactor vessel head.
- c. A detailed review of each outage schedule which involves operation at reduced inventory shall be conducted, looking in particular at evolutions which could perturb the NCS.
- d. Actions that could perturb the NCS during reduced inventory operation shall require prior notification of the shift supervisor.
- e. The reactor has been subcritical for at least 7 days.

REMEDIAL ACTIONS:

- a. With the vent paths of 16.5-1a and b not available immediately initiate action to provide the required hot leg vent path and suspend all activities which may perturb NCS level or which may reduce the reliability of the operating ND Loop.
- b. If the vent path of 16.5-1b cannot be provided, ensure containment closure can be achieved prior to the onset of core boiling and suspend any activities that may reduce NCS inventory.

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) Integrated Scheduling Management Procedure 3.1, Outage Planning and Execution Responsibilities
- 4) McGuire Nuclear Station responses to Generic Letter 88-17 dated January 3, 1989, February 2, 1989, March 10, 1989 and February 24, 1993.
- 5) McGuire Station Directive 3.1.3 (MSD403) Shutdown Risk Management Guidelines

BASIS:

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.

16.5 REACTOR COOLANT SYSTEM

REDUCED INVENTORY OPERATION WITH IRRADIATED FUEL IN CORE

16.5-2 POWER SYSTEMS/DECAY HEAT REMOVAL

COMMITMENT

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Prior to reducing the Reactor Coolant System (NC) level to less than 60" Wide Range NC system level, three power sources and two decay heat removal loops consisting of one of the following combinations shall be available:

- a
  - 1) Two independent buslines capable of supplying the 4160V buses via normal or standby 7KV/4160V transformers.
  - 2) One D/G capable of supplying a 4160V bus.
  - 3) Two ND pumps available with one in operation.
  - 4) Two trains of KC and RN pumps available with flow capacity sufficient to maintain stable core exit temperature.
- b
  - 1) One busline capable of supplying at least one 4160V bus via normal or standby 7KV/4160V transformers.
  - 2) Two D/G's and associated 4160V buses.
  - 3) Two ND pumps available with one in operation.
  - 4) Two trains KC and RN pumps available with flow capacity sufficient to maintain stable core exit temperature.

REMEDIAL ACTIONS:

With the requirements of 16.5-2 not met, immediately take actions to restore the necessary power supplies to service and suspend all activities which may perturb NCS level or which may reduce the reliability of the operating ND Loop.

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
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- 5) McGuire Station Directive 3.1.3 (MSD403) Shutdown Risk Management Guidelines

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16.5 REACTOR COOLANT SYSTEM

REDUCED INVENTORY OPERATION WITH IRRADIATED FUEL IN CORE

16.5-3 REACTIVITY CONTROL

COMMITMENT

Prior to reducing the Reactor Coolant System (NC) level to less than 60" Wide Range NC system level, the following independent sources and makeup paths of borated water must be available:

- a. One high head source from NV pump train A or train B taking suction on the FWST and capable of discharging to the NC system.
- b. One low head (gravity) source supplied from the FWST to the NC system.

REMEDIAL ACTION:

With the requirements of 16.5-3 not met, immediately take actions to restore the required makeup sources and suspend all activities which may perturb NCS level or which may reduce the reliability of the operating ND Loop.

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
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16.5 REACTOR COOLANT SYSTEM

REDUCED INVENTORY OPERATION WITH IRRADIATED FUEL IN CORE

16.5-4 INSTRUMENTATION

COMMITMENT

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Prior to reducing the Reactor Coolant System (NC) level to less than 60" Wide Range NC system level, the following conditions shall be met:

- a. Two independent trains of NC level instruments with trend capability are required. These instruments consist of the NCS wide range and narrow range instruments with level alarm setpoints for low and high levels.
- b. Two core exit thermocouples shall be maintained operating while the reactor vessel head is in place.\*

NOTE:

The OAC computer points for these thermocouples should be used for trending and alarm.

- \* Final removal of the last two core exit thermocouples shall occur no sooner than two hours prior to reactor vessel head removal.
- \* Replacement of at least two thermocouples within two hours after reinstalling the reactor vessel head.
- \* During the time period that core exit thermocouples are unavailable, two additional trains of NC system level instrumentation shall be required. These two trains may be satisfied by any combination of either High Range RVLIS, Low Range RVLIS or NC system ultrasonic level instrumentation.

REMEDIAL ACTIONS:

- a. If the instruments of 16.5-4a are not available, immediately take actions to restore the instrumentation prior to initiating any activity which may reduce NCS inventory or significantly change NCS pressure.
- b. With one train of the instrumentation of 16.5-4b unavailable, immediately take actions to restore the

required instrumentation prior to the removal of the last two thermocouples.

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
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16.5      REACTOR COOLANT SYSTEM

REDUCED INVENTORY OPERATION WITH IRRADIATED FUEL IN CORE

16.5.5      CONTAINMENT CLOSURE

COMMITMENT

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Prior to reducing the Reactor Coolant System (NC) level to less than 60" Wide Range NC system level, the following conditions shall be met:

The capability to close containment following a loss of RHR shall be assured. Containment closure completion shall be achievable prior to the onset of core boiling in the event ND is lost.

REMEDIAL ACTION:

If it becomes known that the requirements of 16.5-5 can not be met or may not be met, immediately initiate actions to ensure the requirements can be met and suspend all activities which may perturb NCS level or which may reduce the reliability of the operating ND Loop.

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) Integrated Scheduling Management Procedure 3.1, Outage Planning and Execution Responsibilities
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