

ATTACHMENT 1

PROPOSED TECHNICAL SPECIFICATION CHANGE - UNIT 1

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PDR ADOCK 05000338
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REACTOR COOLANT SYSTEM

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 particulate radioactivity monitoring system, and
- b. The containment atmosphere gaseous radioactivity monitoring system.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one of the above required radioactivity monitoring leakage detection systems inoperable, operation may continue for up to 30 days provided appropriate grab samples are obtained and analyzed at least once per 24 hours and all flow from the containment sump is measured; otherwise, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With both of the required radioactivity monitoring systems inoperable, operation may continue for up to seven days provided appropriate grab samples are obtained and analyzed at least once per 24 hours, all flow from the containment sump is measured and a Reactor Coolant System water inventory is performed at least once per 12 hours during steady state operation. Leakages measured must be within the limits of T.S. 3.4.6.2.

SURVEILLANCE REQUIREMENTS

4.4.6.1 The leakage detection systems shall be demonstrated OPERABLE by:

- a. Containment atmosphere particulate and gaseous monitoring system-performance of CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL at the frequencies specified in Table 4.3-3,
- b. Containment sump discharge flow measurement system-performance of CHANNEL CALIBRATION at least once per 18 months.

ATTACHMENT 2

PROPOSED TECHNICAL SPECIFICATION CHANGE - UNIT 2

REACTOR COOLANT SYSTEM

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 particulate radioactivity monitoring system, and
- b. The containment atmosphere gaseous radioactivity monitoring system.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one of the above required radioactivity monitoring leakage detection systems inoperable, operation may continue for up to 30 days provided appropriate grab samples are obtained and analyzed at least once per 24 hours and all flow from the containment sump is measured; otherwise, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With both of the required radioactivity monitoring systems inoperable, operation may continue for up to seven days provided appropriate grab samples are obtained and analyzed at least once per 24 hours, all flow from the containment sump is measured and a Reactor Coolant System water inventory is performed at least once per 12 hours during steady state operation. Leakages measured must be within the limits of T.S. 3.4.6.2.

SURVEILLANCE REQUIREMENTS

4.4.6.1 The leakage detection systems shall be demonstrated OPERABLE by:

- a. Containment atmosphere particulate and gaseous monitoring system-performance of CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL at the frequencies specified in Table 4.3-3,
- b. Containment sump discharge flow measurement system-performance of CHANNEL CALIBRATION at least once per 18 months.

ATTACHMENT 3

DISCUSSION OF PROPOSED TECHNICAL SPECIFICATION CHANGE

DISCUSSION OF PROPOSED TECHNICAL SPECIFICATION CHANGE

The proposed Technical Specification changes reflect a revision to Technical Specification 3/4.4.6.1, for North Anna Units 1 and 2, to clarify the action statement for a radioactivity monitoring leakage detection system being inoperable and allow for operation for a limited time with both radioactivity monitoring leakage detection systems inoperable.

The probability of occurrence or the consequences of a malfunction of equipment important to safety and previously evaluated in the FSAR is not increased because the containment sump inventory and discharge will continue to be monitored at least once per 12 hours. In addition, a change in the unidentified leak rate can normally be detected by the change in operating frequency of the containment sump pump and/or by a change in the sump level. As stated in Reg. Guide 1.45, "Industry practice has shown that water flow rate changes of from 0.5 to 1.0 gpm can readily be detected in containment sumps by monitoring changes in sump water level, in flow rate, or in the operating frequency of pumps."

Operation of the containment sump pump is alarmed and recorded on the computer typewriter. This printout shows frequency of operation.

The possibility of a different type of accident or malfunction than was previously evaluated in the FSAR has not been created because the increase in the frequency of determining identified and unidentified RCS leakage will detect unacceptable RCS leakage.

The margin of safety as described in the BASIS section of any part of the Technical Specifications is not reduced because the leakage detection systems will remain "generally consistent with the recommendations of Reg. Guide 1.45." In addition, acceptable limits of identified and unidentified RCS leak rates have not been changed.