REACTOR COOLANT SYSTEM

3/4.4.11 REACTOR COOLANT SYSTEM VENTS

LIMITING CONDITION FOR OPERATION

3.4.11 At least one reactor coolant system vent path consisting of at least two valves in series powered from emergency buses shall be OPERABLE and closed* at each of the following locations:

a. Reactor Vessel head

b. Pressurizer steam space

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With one of the above reactor coolant system vent paths inoperable, STARTUP and/or POWER OPERATION may continue provided the inoperable vent path is maintained closed with power removed from the valve actuator of all the valves in the inoperable vent path; restore the inoperable vent path to OPERABLE status within 30 days, or, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

*For the plants using power operated relief valve (PORV) as a vent path, PORV block is not required to be closed if the PORV is operable.

b. With both of the above reactor coolant system vent paths inoperable; maintain the inoperable vent path closed with power removed from the valve actuators of all the valves in the inoperable vent paths, and restore at least one of the vent paths to OPERABLE status within 72 hours or be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.4.11 Each reactor coolant system vent path shall be demonstrated OPERABLE at least once per 18 months by:

1. Verifying all manual isolation valves in each vent path are locked in the open position.
2. Cycling each valve in the vent path through at least one complete cycle of full travel from the control room during COLD SHUTDOWN or REFUELING.

PRESSURE/TEMPERATURE LIMITS (Continued)

the RCS cold legs are less than or equal to 300°F. Either PORV has adequate relieving capability to protect the RCS from overpressurization when the transient is limited to either: (1) the start of an idle RCP with the secondary water temperature of the steam generator less than or equal to 50°F above the RCS cold leg temperatures, or (2) the start of a HPSI pump and its injection into a water--solid RCS.

3/4.4.10 STRUCTURAL INTEGRITY

The inservice inspection and testing programs for ASME Code Class 1, 2 and 3 components ensure that the structural integrity and operational readiness of these components will be maintained at an acceptable level throughout the life of the plant. These programs are in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR Part 50.55(g) except where specific written relief has been granted by the Commission pursuant to 10 CFR Part 50.55a(g)(6)(i).

Components of the Reactor Coolant System were designed to provide access to permit inservice inspections in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1971 Edition and Addenda through Winter 1972.

3/4.4.11 REACTOR COOLANT SYSTEM VENTS

Reactor Coolant System Vents are provided to exhaust noncondensible gases and/or steam from the primary system that could inhibit natural circulation core cooling. The OPERABILITY of at least one reactor coolant system vent path from the reactor vessel head , and the pressurizer steam space ensures the capability exists to perform this function.

The valve redundancy of the reactor coolant system vent paths serves to minimize the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve, power supply or control system does not prevent isolation of the vent path.

The function, capabilities, and testing requirements of the reactor coolant system vent systems are consistent with the requirements of Item II.B.1 of NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.

Attachment 2

Technical Justification and Safety Analysis

By letter dated November 2, 1983, the NRC provided Generic Letter 83-37 concerning Technical Specifications for NUREG-0737 items scheduled for implementation after December 31, 1981. The NRC provided guidance relative to Technical Specifications for the Reactor Coolant System (RCS) Vent System. The proposed specification contained herein is based on this guidance.

The McGuire design for the RCS vent system includes paths from the pressurizer steam space and the reactor vessel head. Reactor coolant system high point (the steam generator U-tubes) vents were specifically not required by the NRC. Thus, the LCO action statements reflect at most only two paths being operable.

The surveillance being proposed reflects some guidance provided in GL 83-37 and the original NUREG-0737 requirement. Specifically, Clarification (11) of Item II. B.1 states:

> Provisions to test for operability of the reactor coolant vent system should be a part of the design. Testing should be performed in accordance with subsection IWV of Section XI of the ASME Code for Category B valves.

Accordingly, proposed Specification 4.4.11 includes only items 1, and 2. Model Technical Specification 4.4.11.3 is not proposed for the following reasons. The RCS vent system was not designed to perform flow verification testing. Such tewting is not presently required for PORV and primary system safety valves, which are also required to pass flow to function. Furthermore, flow verification was not an original requirement of NUREG-0737.

In addition to the preceding, Duke is concerned as to what constitutes an acceptable flow test. What would be the measured variable; flow, pressure decrease? Duke believes that flow verification testing is an unnecessary burden to the operators and beyond the initial requirements of testing of this system. Furthermore, we believe that the full stroke testing of each valve in the vent path should provide an acceptable degree of assurance that the system is capable of performing its intended function. As such flow verification testing is not proposed.

Attachment 3

Analysis of Significant Hazards Considerations

As required by 10 CFR 50.91, this analysis is provided concerning whether the proposed modifications of the Technical Specifications involve significant hazards considerations, as defined by 10 CFR 50.92.

The proposed modification of the Technical Specifications involves expanding the Technical Specifications to cover the Reactor Coolant System (RCS) Vent System which has been installed in response to TMI Action Plan Item II. B. 1. The proposed change is based on the model Technical Specifications provided in NRC Generic Letter 83-37.

The proposed Technical Specifications for the operability and surveillance of the RCS Vent System are for ensuring proper and accurate performance of these systems. The proposed Technical Specifications do not relax any existing limits, instead additional requirements are proposed on newly installed equipment.

The Federal Register Notice which published the interim final rule contained examples of amendments that are not likely to involve significant hazards considerations. One of these is a change that constitutes an additional limitation, restrictions, or control not presently included in the technical specifications.

The proposed amendment included herein does 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 a margin of safety.

Based upon the preceding, Duke Power Company concludes that the proposed amendments do not involve a significant hazard consideration.