

3.24 Reactor Vessel Water Level Indication

Applicability

Applies to the operability requirements for the Reactor Vessel Water Level Indication when the reactor is critical.

Objectives

To assure operability of the Reactor Vessel Water Level instrumentation which may be useful in diagnosing situations which could represent or lead to inadequate core cooling.

Specification

Two channels of the Reactor Vessel Water Level Instrumentation System shall be OPERABLE.

If one channel becomes INOPERABLE that channel shall be returned to OPERABLE within 30 days. If the channel is not restored within 30 days, within 14 days, submit a special report to the NRC providing the details of the inoperability, to include cause, action being taken and projected date for return to OPERABLE status.

With no channels OPERABLE, one channel shall be restored to OPERABLE status within 7 days. If at least one channel is not restored within 7 days, within 14 days, submit a special report to the NRC providing the details of the inoperability, to include cause, action being taken and projected date for return to OPERABLE status.

Bases

The Reactor Vessel Water Level Indication (Reference 1) provides indication of the trend in water inventory in the hot legs and reactor vessel during the approach to inadequate core cooling (ICC). In this manner additional information may be available to the operator to diagnose the approach of ICC and to assess the adequacy of responses taken to restore core cooling.

Each Reactor Vessel Water Level channel is comprised of a hot leg level indication and a reactor vessel level indication.

The system is required to be operable (as defined previously) when the plant is critical.

The system is an information system to aid the operator during the approach to inadequate core cooling. There is not regulatory limit for this system.

Inoperability of the system removes the availability of an information system. Other useful instrumentation for inadequate core cooling will be available. The Subcooling Margin Indication System is relied upon to determine subcooling margin when the reactor coolant pumps are operating or when natural circulation can be verified. When natural or forced circulation cannot be verified, the margin to saturation is determined by manual calculation, based on reactor coolant temperature (in-core thermocouples) and pressure indications available in the control room and steam tables. See Tech. Spec. 3.5.5.

6.9 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Administrator of the NRC Region 1 Office unless otherwise noted.

6.9.1 Routine Reports

- A. Startup Report. A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant. The report shall address each of the tests identified in the UFSAR, Chapter 13 and shall in general include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described.

Any additional specific details required in license conditions based on other commitments shall be included in this report.

Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

- B. Annual Reports. Annual reports covering the activities of the unit as described below during the previous calendar year shall be submitted prior to March 1 of each year. (A single submittal maybe made for the station. The submittal should combine those sections that are common to both units at the station.)

1. DELETED
2. The following information on aircraft movements at the Harrisburg International Airport:
 - a. The total number of aircraft's movements (takeoffs and landings) at the Harrisburg International Airport for the previous twelve-month period.
 - b. The total number of movements of aircraft larger than 200,000 pounds at the Harrisburg International Airport for the previous twelve-month period, broken down into scheduled and non-scheduled (including military) takeoffs and landings, based on a current estimate provided by the airport manager or his designee.

3. The following information from the periodic Leak Reduction Program tests shall be reported:
 - a. Results of leakage measurements,
 - b. Results of visual inspections, and
 - c. Maintenance undertaken as a result of Leakage Reduction Program tests or inspections.
4. The following information regarding pressurizer power operated relief valve and pressurizer safety valve challenges shall be reported:
 - a. Date and time of incident,
 - b. Description of occurrence, and
 - c. Corrective measures taken if incident resulted from an equipment failure.
5. The following information regarding the results of specific activity analysis in which the primary coolant exceeded limits of Technical Specifications 3.1.4.1 shall be reported:
 - a. Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded;
 - b. Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations;
 - c. Cleanup system flow history starting 48 hours prior to the first sample in which the limit was exceeded;
 - d. Graph of the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady-state level; and
 - e. The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.

C. DELETED

6.9.2 DELETED

6-13

(Pages 6-14, 6-15, and 6-16 deleted)

Amendment No. ~~41, 37, 72, 77, 82, 117, 129~~, 254