



Additional Event Description and Probable Consequences:

Reference Inspection Report Nos. 50-250/81-05 and 50-251/81-05

During review of Quality Control Surveillance Reports "the (NRC) inspector noted that the technical specification limit for chloride concentration was exceeded in the unit 3 reactor coolant system (RCS) for several days in May 1980 while unit 3 was in cold shutdown. Technical Specification Limiting Condition for Operation 3.1.5.d. requires that chloride concentration be maintained at less than 0.15 ppm. For several days in May 1980, Unit 3 RCS chloride concentration was 0.20 ppm. The unit was in cold shutdown which was the condition required by LCO 3.1.5.d. The licensee concluded that LCO 3.1.5.d. had been exceeded but that since the plant was already in the condition required by technical specifications and corrective action was taken that no violation of TS 3.1.5.d. had occurred and that no report was required. The inspector noted that the licensee reporting requirements for 30 day reportable occurrences are identical to Regulatory Guide 1.16, 30 day reportable occurrence requirements, less the examples provided in the Regulatory Guide. The Regulatory Guide paragraphs c.2.a(2) and c.2.b(2) (reporting requirements for degraded mode) have previously been interpreted to mean that

'...whenever a parameter or system enters an action mode described in the related LCO, no violation of the specification has occurred, but a 30 day written report is required.'

The licensee is not committed to follow Regulatory Guide 1.16, Reporting of Operating Information - Appendix A Technical Specifications. The licensee's Technical Specification 6.9 "Reporting Requirements" and section 6.9.2.b "Thirty Day Written Reports" is a verbatim copy of Regulatory Guide 1.16 less the examples produced in the regulatory Guide; therefore, the interpretation of that portion of the Regulatory Guide is considered to be an equally valid interpretation of the licensee reporting requirement. The licensee did not have the benefit of the Inspection and Enforcement Manual Interpretations when he decided that the occurrence was not reportable; however, that notwithstanding, the failure to report the out of specification RCS chloride concentration is a violation of Technical Specification 6.9.2.b(2). (250, 251/81-05-02).

The licensee determined that the source of the chloride in the RCS was from internal leakage in the boron evaporators contaminating the concentrated boric acid solution which was then transferred to the boric acid storage tanks. Subsequent borations then transferred small amounts of chloride to the RCS of both units. The dilution of the contaminated boric acid solution by the large volume of pure water in the RCS and the continuous purification of the RCS by the Chemical and Volume Control System (CVCS) demineralizers kept the chloride concentration within specification. During the Unit 3 cold shutdown, however, the continuous purification process was lost for several days as a result of maintenance requirements. The chloride concentration then slowly increased to 0.20 ppm apparently as a result of achieving a new higher equilibrium level with the 'resident' chlorides leaching out of RCS materials and corrosion product inventory within the RCS and interconnected systems. When the CVCS system was returned to service, chloride concentrations were brought back into specification. The boric acid storage tanks have been internally cleaned and are now chloride free. Replacement steam tube bundles (for boric acid evaporators) have been placed on order. Replacement of these tube bundles will complete the long term corrective action planned by the licensee."

