



Description of Event

On August 12, 1982 with the unit in Mode 5 (RCS temperature 100°F to 105°F) the chloride level in the reactor coolant system exceeded the steady state limit of 0.15 ppm. The chloride concentration exceeded the limit for a period of approximately 69 hours. This event is contrary to T.S. 3.4.7 and is reportable pursuant to T.S. 6.9.1.9.b.

Probable Consequences of Occurrence

The RCS chemistry limits ensure that corrosion is minimized to reduce the potential for system leakage or failure. Chloride concentration in the RCS is minimized to prevent the occurrence of chloride stress corrosion. Since the coolant temperature was low (about 100°F) and the chloride concentration was reduced to below the steady state limit prior to increasing RCS temperature, the effect of a high chloride concentration was minimized. Therefore, the health and safety of the public were not affected.

Cause of Event

This event was caused by the introduction of chlorides into the RCS during the removal of thermal sleeves and due to the loss of ion removal capability by the isolation of the RHR letdown path to the ion exchanger. This isolation was made necessary by the High Radiation Sample System Design Change. The isolation of letdown allowed the chloride concentration to increase over this period.

Immediate Corrective Action

Chloride levels were reduced by realigning the RHR letdown to the primary ion exchanger. The concentration was verified to be less than; the T.S. 3.4.7 limit within 69 hours. An engineering evaluation was performed prior to increasing temperature above 200°F. It showed that the slightly higher chloride concentration had no effect on the RCS piping or components.

Scheduled Corrective Action

No further action required.

Action Taken To Prevent Recurrence

No further action required. This is considered to be an isolated event.

Generic Implications

There are no generic implications from this event.