



EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

During performance of Core Spray Sparger Visual Inspections in accordance with NRC IE Bulletin 80-13, a semi-circular linear indication was observed on the end cap of the junction box on the "C" Core Spray Sparger. Further investigation has revealed that this indication is a crack, apparently in the sensitized, heat-affected zone of a weld used to install a one-inch diameter solid plug in a visual access hole drilled in the center of the end cap.

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

The probable failure mode is IGSCC. A preliminary review of documentation concerning the material used to manufacture the four junction box end caps indicates that the cracked material may have been more susceptible to IGSCC than that used for the other three end caps. At this time, consideration is being given to application of a clamp-type cover on the affected end cap. This cover would prevent loss of the plug in the reactor vessel in the event it is dislodged outwardly during core spray operation, and would serve to restrict unplanned flow from the cracked area. Design and manufacture of this device is in progress. A meeting with the NRC in Bethesda has been scheduled for October 31, 1980, at which a full report concerning intended corrective action will be presented.