

## **LER 272/82-041**

Event Description: Trip with Two Charging Pumps Inoperable

Date of Event: June 26, 1982

Plant: Salem 1

### **Summary**

On June 26, 1982, during a routine inspection, water was discovered in the 12 charging pump gear oil reservoir, and the pump was declared inoperable. A leak in the gear oil cooler allowed service water to mix with the gear oil of the 12 pump. Charging pump 13 was caution tagged and already inoperable at the time of the discovery due to an unidentified noise that occurred during its operation. The 11 charging pump was operable during this event. Charging pump 13 is a hydro pump and is not modeled in the accident sequence precursor (ASP) models. The ASP models assume that in order for the HPI system and feed and bleed to function properly using the charging pumps, both centrifugal charging pumps (Nos. 11 and 12) are needed.

Since it is not known when the leak in the gear oil cooler occurred, it was assumed that the condition was present during a trip that occurred five days prior to this event. This event was modeled as a transient with train 3 of high-pressure injection (HPI) and feed and bleed failed. The conditional core damage probability estimate is  $1.1 \times 10^{-6}$ . The dominant sequence involved a successful reactor trip, failure of auxiliary feedwater (AFW), failure of main feedwater (MFW), and failure of feed and bleed.