

Indian Point 2 (IP2) Steam Generator (SG) Tube Failure
Lessons-Learned Task Group
(TAC No. MA9163)

Task Group Notes - Discussion with John Flack and John Ridgely, RES on 7/19/00

Attendees: Alan Rubin, Joe Donoghue

Background

John Flack and John Ridgely have been involved with the development of the draft NUREG/CR, "Basis Document for Large Early Release Frequency (LERF) Significance Determination Process (SDP)." John Ridgely is the RES Project Manager for this project. The draft NUREG/CR report has been sent to NRR, and the SDP was used by Steve Long in preparing the May 4, 2000, memo from R. Barrett, NRR, to R. Blough, RI.

Discussion

Joe and Alan gave a brief background on the IP2 SGTR event, including the fact that row 2 SG tubes had been left in service with flaws since the 1997 inspection. Based on this discussion, John Flack felt that the IP2 SGTR may not have been a random failure. Depending on the inspection reports, the failure could have resulted from a plant-specific inadequate inspection program and lack of corrective action following the identification of a PWSCC in a row 2 tube U-bend for the first time. The color of the finding (i.e., red versus other) is highly dependent on this inspection finding. This situation was unique to IP2, and generic SGTR considerations were not applicable.

According to the SDP, a guillotine break of a SG tube (with a leak rate of approx. 600 gpm) is equivalent to the change associated with the large early release frequency because containment is bypassed. Both John's felt that the red finding in Steve Long's analysis was appropriate and consistent with the draft NUREG/CR SDP. John Ridgely felt that one could argue that the $1E-4$ CDF was conservative from several considerations, including the actual leak rate of 150 gpm being less than the guillotine break leak rate of 600 gpm. Even so, the estimated CDF would not change significantly, and the SDP would still result in a red finding.

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