N367. PWRs To Assess Steam Generator Problems For NRC

The recent discovery of unusually high number of circumferential cracks in steam generator tubes at the Maine Yankee nuclear plant has prompted the Nuclear Regulatory Commission (NRC) to ask licensees for more data.

NRC requests certain licensee actions including:

- 1) Evaluate recent operating experience with respect to the detection and sizing of circumferential indications.
- 2) Develop a safety assessment justifying continued operation until the next scheduled steam generator tube inspections, based on recent experience, past inspection results, susceptibility to cracking, and estimated crack growth rate.
- 3) Develop a plan for the next steam generator tube inspections that addresses scope, methods, equipment, and criteria.

The NRC identified several factors in detecting cracks: the scope of the inspection, the non-destructive examination (NDE) methods used for the inspection, including plant-specific factors that affect the sensitivity of the techniques, the equipment setup for these techniques, the analysis of the NDE data, the data analyst training and performance demonstration program, and the methods used to minimize interfering signals.

The NRC also identified several factors that limit accurate assessment of tube degradation: the inability to reliably size indications, the threshold of detection for circumferential indications, and the inability to reliably predict crack growth rates.

For more, "NRC: PWRs Must Justify Continued Operation," pg.24, Nuclear News, June 1995/Vol.38/No.8.