N383. SG Modifications May Provide Life Extension

Commonwealth Edison (ComED) has proposed a new method of extending the life of the steam generators (SGs) at its Byron-1 and Braidwood-1 nuclear plants by turning some tubes into structural supports. If the Nuclear Regulatory Commission grants a license amendment, ComED would be the first utility to implement this design, which the industry has developed over the past eight years. ComEd would like to expand 20 of the 4000 tubes in each steam generator and plug them, eliminating the gap between the tube and the support plate. The thickened tubes would give the tube and support plate more stability. It would reduce the likelihood of a steam generator tube rupture. By increasing support to the tubes, ComED could keep tubes with minor degradation in service longer without danger of a rupture. ComEd plans to replace the steam generators at Braidwood-1 in 1998 and at Byron-1 in 1999. Each plant has four steam generators. ComED described the modifications in a meeting with the NRC. The utility would like to try the technique during scheduled refueling outages at the two plants this fall. Westinghouse would perform the modifications at one or both of the plants. The changes would not affect the power ratings of the plants.