

Defect is an imperfection of such severity that it exceeds the minimum acceptable tube wall thickness of 50%. A tube containing a defect is defective.

Plugging Limit is the imperfection depth beyond which the tube must be removed from service or repaired, because the tube may become defective prior to the next scheduled inspection. The plugging limit is 40% of the nominal tube wall thickness.

F* Distance is the distance of the expanded portion of a tube which provides a sufficient length of undegraded tube expansion to resist pullout of the tube from the tubesheet. The F* distance is 1.12 inches (including eddy current uncertainty). The F* distance is measured from the bottom of the upper roll transition of the repair roll toward the bottom of the tubesheet.²

F* Tube is a tube with degradation, below the F* distance, equal to or greater than 40%, and not degraded within the F* distance.²

6. Corrective Measures

All tubes that leak or have degradation exceeding the plugging limit shall be plugged or repaired by a process such as sleeving^{*1} or classification as an F* tube² prior to return to power from a refueling or inservice inspection condition. Sleeved tubes having sleeve degradation exceeding 40% of the nominal sleeve wall thickness shall be plugged.

7. Reports

- (a) After each inservice examination, the number of tubes plugged or repaired in each steam generator shall be reported to the Commission as soon as practicable.
- (b) The complete results of the steam generator tube inservice inspection shall be included in the Annual Results and Data Report for the period in which the inspection was completed.

Reports shall include:

- 1. Number and extent of tubes inspected.
 - 2. Location and percent of all thickness penetration for each indication.
 - 3. Identification of tubes plugged or repaired.
- (c) Reports required by Table 15.4.2-1 - Steam Generator Tube Inspection shall provide the information required by Specification 15.4.2.A.7(b) and a description of investigations conducted to determine cause of the tube degradation and corrective measures taken to prevent recurrence. The report shall be submitted to the Commission prior to resumption of plant operation.

^{*1} Braze joints shall not be employed. Tubes previously subject to explosive plugging shall not be sleeved.

² Applicable only to the Westinghouse Model 44 steam generators in Unit 2. Following steam generator replacement in Unit 2, the definitions and F* repair option are null and void.

10 CFR 50. The same code is utilized for both Unit 1 and Unit 2. Safety--related components are classified as safety Class 1, 2, or 3. The code boundaries are defined based upon the following documents:

- (a) Regulatory Guide 1.26, "Quality Group Classifications and Standards for Water, Steam, and Radioactive Waste Containing Components of Nuclear Power Plants."
- (b) American National Standard N18.2, "Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants."
- (c) Point Beach Nuclear Plant Units 1 & 2 Final Safety Analysis Report.

Code classified components are tabulated showing each specific examination area and the examination requirements in an inspection interval long-term plan. This plan is completely revised for each ten-year inspection interval.

A sound roll expansion throughout the F* distance provides a tube to tubesheet interface that ensures the requirements of Regulatory Guide 1.121 are met regardless of the severity of any tube degradation below the F* distance. The F* distance of 1.12 inches is comprised of 0.88 inches of sound roll expansion that ensures tube integrity requirements are met plus 0.24 inches which allows for eddy current measurement uncertainty.