

RAI 2-3

Revise Chapter 8 of the application to incorporate the fuel rod acceptance and qualification tests for the ATRIUM-11 fuel rods and end caps.

In response to RAI 2-4, the applicant revised the description of the containment boundary in Section 4.1.1 of the application by describing qualification and acceptance tests for the ATRIUM 11 fuel rod and end caps. The applicant is asked to incorporate these tests into Chapter 8 of the application, which the staff can incorporate as a Certificate of Compliance condition.

This information is required to ensure compliance with 10 CFR 71.33(a).

AREVA Response

Section 8.2.2 Leakage Tests will be changed to read as follows:

“Containment is provided by the fuel rod for Type B shipments. The fuel rods are manufactured under a Quality Assurance Program meeting the requirements of 10 CFR 71 Subpart H. Welds of the fuel rod end caps to the cladding are conducted under a qualified process and verified for integrity by such means as X-ray inspection, ultrasonic testing, or process control. For 11x11 fuel rods, the integrity of the closure welds for the fuel rods are periodically assessed using burst testing. This testing is considered successful if the ultimate hoop strength at room temperature obtained is equal or greater than the minimum ultimate strength established from room temperature longitudinal tensile tests for the same lot. Each loaded fuel rod (of any design) is leak tested after fabrication to assure that the rod is leak tight ($<1 \times 10^{-7}$ atm-cc/s). Neither the inner or outer container is credited with providing leak protection. Therefore, no leak test of the packaging is required.”