ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
NCR 1319RO AND 1319R1
POTENTIAL INFERIOR STRUCTURAL STEEL CONTAINMENT
VESSEL MOVEMENT ENVELOPE
FIRST INTERIM REPORT

Description of Deficiency

The refueling canal concrete outline from 8 inches north of azimuth 170° to 15'-3" north of azimuth 270° (to elevation 744.0) or to 13'-8" (above elevation 744.0) is bounded by a radius of 57'-2" from centerline of reactor building. This radius is applicable to the concrete features above elevation 719.75. The steel containment vessel is located by a 57'-6" radius to its inboard side. The 4-inch difference between the above two radii creates a seismic movement envelope for the steel containment vessel. This envelope is shown to exist as an air void above elevation 719.75. The air void does not exist in either unit causing potential changes in the stress and displacement pattern of the vessels.

TVA construction personnel used expansion joint material as a forming agent instead of conventional forms due to the degree of difficulty in removing the forms. This expansion joint material was designed to terminate at elevation 719.75' instead of elevation 750.00'.

Safety Implications

The exact safety implications will not be known until the transient analysis is reevaluated using the additional constraint imposed by the expansion-joint material.

Corrective Action

TVA is presently performing a transient analysis of the as-built condition to determine the effect of the extra expansion joint material.

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