

From: N. Kaly Kalyanam
To: Bryan Miller
Date: 2/23/04 9:20AM
Subject: RAI from Rich Lobel, SPLB

Bryan,

I am attaching the draft RAI from DSSA/SPSB (C), Containment. Systems, Rich Lobel.

Please review the questions and let me know if Waterford 3 can provide the response within 30 days from the receipt of the final RAI.

Thanks

Kaly

Docket : 50-382

MC 1355

REQUEST FOR ADDITIONAL INFORMATION

ENTERGY OPERATIONS, INC.

WATERFORD STEAM ELECTRIC STATION, UNIT 3

DOCKET NO. 50-382

1. (a) Verify that all input parameters to the containment peak pressure and temperature (both loss of coolant accident (LOCA) and main steam line break (MSLB)), minimum pressure (LOCA), environmental qualification (EQ) and subcompartment analyses remain the same as those in the final safety analyses report (FSAR) except for those affected by the power uprate. For example: containment volume, heat sink descriptions, heat exchanger performance, equipment flow rates and flow temperatures, initial relative humidity, refueling water storage tank temperature, ultimate heat sink temperature, etc. Justify any changes made for the power uprate analyses. Verify that measurement uncertainty was conservatively included in these values.

(b) Explain what is meant by the statement on page 2.5-8 of the November 13, 2003, submittal that "... instrument measurement uncertainty is implicitly considered in accordance with the graded approach in containment pressure and temperature response analyses."

(c) Verify that the measurement uncertainty was included in the determination of the following input to the containment LOCA and MSLB calculations:

- initial containment temperature
- initial containment pressure
- initial containment spray riser level
- component cooling water flow to fan coolers
- component cooling water temperature

According to Page 6.2-4 of the FSAR, it appears that nominal values were used, not the values with measurement uncertainty included.

- Verify that the same version of the GOTHIC code is used as in Waterford 3 license Amendment 165.
 - Verify that the same assumptions are made regarding the use of 8 percent reevaporation as in the FSAR (Page 6.2-8).
4. Verify that the MSLB break area is adjusted to provide dry steam to the containment, as described in the FSAR (Page 6.2-8).
5. Verify that the methods for calculating the EQ envelope have not changed from those described in the FSAR. Were calculations of the velocity currents at the surface of vital equipment recalculated?