From: Michael Johnson > NRR
To: Black, Suzanne
Date: Wed, May 26, 2004 7:47 AM
Subject: Fwd: Proposed plan for NPSH Overpressure Issue

B/15

From: Richard Lobel
To: Allen Howe; Michael Johnson; Michael Tschiltz; Rick Ennis; Robert Dennig
Date: Tue, May 25, 2004 1:48 PM
Subject: Proposed plan for NPSH Overpressure Issue

CC: Brenda Mozafari

CURRENT POSITION ON ALLOWING CREDIT FOR CONTAINMENT ACCIDENT PRESSURE IN DETERMINING AVAILABLE NPSH

Current Position:

1. Positions 1.3.1.1 and 2.1.1.1 of Regulatory Guide 1.82 Rev 3 implies that no credit for containment accident pressure should be taken when determining available NPSH for other than currently operating reactors (none for new designs).

2. Positions 1.3.1.2 and 2.1.1.2 state that for operating PWRs and BWRs, credit for accident pressure is allowed when "the design [of the ECCS and containment heat removal pump systems] cannot be practicably altered." The discussion section of RG 1.82 Rev 3 states that "for some operating reactors, credit for containment accident pressure may be necessary."

These statements and positions have been implemented to mean that credit is allowed when: (1) a conservative calculation shows that sufficient containment accident pressure exists, (2) the temperature of the pumped water is conservatively high, (3) the required NPSH is conservatively high, and (4) no more credit (with some margin) is approved than that which is needed.

3. Containment integrity is assumed consistent with the design basis accident assumptions.

4. Operator actions are accomplished consistent with the EOPs (such as initiating containment cooling, controlling pump flow and control of containment sprays).

5. No test of "necessity" or specific cause of the NPSH deficiency is part of the criteria for allowing credit for containment overpressure.

Proposed Modified Position

1. Item 1 above remains unchanged.

2. Item 2 above remains unchanged except that (4) is deleted. The NRC will not limit the amount of overpressure up to the amount determined to be available by a conservative calculation.

3. The licensee will be required to perform a risk analysis. This analysis must show that credit for containment overpressure results in plant risk remaining acceptable. Containment integrity and the availability of sufficient overpressure will be demonstrated as part of the risk analyses. Operator errors in carrying out the EOPs will be included in the PRA.

4. No test of "necessity" or specific cause of the NPSH deficiency is part of the criteria for allowing credit for containment overpressure.

PLAN FOR RE-EVALUATING CREDIT FOR CONTAINMENT ACCIDENT PRESSURE

1. Withdraw RG 1.1
2. Modify RG 1.82 Rev 3 to reflect the modified position
3. Modify SRP 6.2.2 to reflect modified position