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Subject: NMP2 EPU Draft RAIs - Containment Review
Date: Tuesday, March 29, 2011 11:25:00 AM

Theresa,

As we discussed, please see below draft RAI questions from the containment systems review supporting the NMP2 EPU review. The staff's review does account for the previous RAI response on the CAP topic (NMPNS letter dated 2/19/10). Let me know when you can support a conference call. This Thursday or early next week appears open on my end.

Thanks,
Rich

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RAI#1 - Containment Accident Pressure (CAP)

In the EPU application, it was stated that NMP2 does not need to credit containment accident pressure (CAP) to assure adequate NPSH to the ECCs pumps. However, based on Commission direction in SRM SECY 11-0014, the staff will be applying new guidance on NPSH margin to EPU reviews, including NMP2, to determine whether use of CAP would be necessary if uncertainties are included in the calculations. Also, the maximum erosion zone (defined in the guidance document) should be addressed. The following are some pertinent documents for the licensee.

Letter from NRC to BWROG (3/1/10) transmitting staff guidance ML100550903
Attachment to letter to BWROG containing guidance. ML100550869

Commission paper on the subject of using containment accident pressure ML102590196
Enclosure 1 to Commission paper: ML102110167
Enclosure 2 to Commission paper: ML102780592

Staff Requirements Memorandum (SRM) on Commission paper: ML110740604

Please consider the 3/1/10 guidance document as draft, as the document is being revised as a result of the SRM. The document, however, provides sufficient information to begin addressing the uncertainties and the maximum erosion zone on NPSH margin.

After due consideration of the requirements in the above referenced documents, provide a summary of the NPSH analyses at the EPU conditions, including NPSH required (NPSHR), CAP used, method of calculating NPSH available (NPSHA). Provide the basis for the required NPSH of the ECCS pumps at NMP2, including flow rates assumed, and a comparison with the flow rate for the LOCA peak cladding temperature (PCT) analyses. Also, provide the pump head drop value used in the NPSH analyses (3% or other).

RAI#2 – Combustible Gas Control in Containment

Please provide a brief description of the strategies and guidelines in place at NMP2 for Severe Accident Management in relation to the combustible gas control in containment.