

September 8, 2003

To: Virginia Electric and Power Company

FROM: Stephen Monarque, Project Manager */RA/*
Project Directorate II, Section 1
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: NORTH ANNA POWER STATION, UNITS 1 AND 2 - FACSIMILE
TRANSMISSION OF QUESTIONS ON PROPOSED LICENSE AMENDMENT
TO USE FRAMATOME ANP ADVANCED MARK-BW FUEL (TACS MB4714,
AND MB4715)

A facsimile of the attached questions on containment analysis was transmitted on September 8, 2003 to Mr. Tom Shaub of Virginia Electric and Power Company (VEPCO). These questions were transmitted to VEPCO in order to support a conference call on these questions.

ADAMS ACCESSION NO. ML032731572

Enclosure: Request for Additional Information

REQUEST FOR ADDITIONAL INFORMATION

NORTH ANNA POWER STATIONS, UNITS 1 AND 2

PROPOSED LICENSE AMENDMENT TO USE FRAMATOME ANP FUEL

1. Reference 15 of Topical Report EMF-2103 Revision 0 is Supplement 1 to Revision 2 of ICECON. This has not been supplied to the NRC staff. What is its relevance to the review of the calculation of minimum containment pressure?
2. Please confirm that the version of ICECON, documented in XN-CC-39 dated August 1975 and approved by the NRC staff in a June 30, 1978 SER, is identical with the version documented in EMF-CC-39(P) (dated November 1999). If this is not the case, please describe any differences and explain their effect on the calculated minimum containment pressure.
3. The NRC SER approving ICECON (June 30, 1978) requires, as a condition for approval, that a user of ICECON will provide justification for the values of the area and heat capacities of the structural heat sinks used in the analysis of minimum containment pressure. Please provide justification for the values used. It is not necessary to provide the values themselves.
4. An important consideration in calculating containment pressure is the distribution of the break flow as it enters the containment atmosphere. Please describe the assumption used. CONTEMPT contains a temperature flash model. If temperature flash was used for minimum containment pressure calculations please explain why this is acceptable since temperature flash tends to overestimate pressure.
5. The calculation of peak cladding temperature conservatively assumes a worst single failure. However, it is not conservative to assume a single failure for the minimum containment pressure portion of the calculation. Please explain how the best estimate LOCA methods accommodate these considerations.
6. What is the basis for assuming the distribution of volumes from minimum to maximum is uniform? (Table 7.2-3 of the May 6, 2003 letter) Why is no standard deviation specified?