January 29, 2013

MEMORANDUM TO: R. W. Borchardt

**Executive Director for Operations** 

FROM: Annette Vietti-Cook, Secretary /RA/

SUBJECT: STAFF REQUIREMENTS – BRIEFING ON VENTING SYSTEMS

FOR MARK I AND MARK II CONTAINMENTS, 9:00 A.M., WEDNESDAY, JANUARY 9, 2013, COMMISSIONERS' CONFERENCE ROOM, ONE WHITE FLINT NORTH,

ROCKVILLE, MARYLAND (OPEN TO PUBLIC ATTENDANCE)

The Commission was briefed by the NRC staff and a panel of external stakeholders on containment venting systems for boiling water reactors with Mark I and Mark II containments. Maria Korsnick, Chief Nuclear Officer and Chief Operating Officer, Constellation Energy Nuclear Group, LLC, discussed industry plans for filtering strategies; Preston Swafford, Chief Nuclear Officer, Tennessee Valley Authority (TVA), discussed TVA's plans for filtering strategies; Neil Wilmshurst, Vice President, Nuclear, Electric Power Research Institute (EPRI), discussed EPRI's technical analysis of filtering strategies; David Lochbaum, Director, Nuclear Safety Project, Union of Concerned Scientists, discussed the benefits of filtered vents; and Ramzi Jammal, Executive Vice-President and Chief Regulatory Operations Officer, Canadian Nuclear Safety Commission, discussed the regulatory basis for filtered venting in Canada.

The staff should provide the Commission a listing, and copies, of previous back fit rule costbenefit analyses provided formally to the Commission that relied on qualitative factors in considering orders or other actions that modify requirements on Part 50 facilities. The staff should identify those cases in which a qualitative analysis was used to justify a decision when a quantitative analysis indicated a change may not be cost-beneficial.

(EDO) (SECY Suspense: 2/5/13)

The staff should review the BWR Owners Group tabletop analysis done at Constellation Energy on EPRI Report 1026539, September 2012, *Investigation of Strategies for Mitigating Radiological Releases in Severe Accidents - BWR Mark I and Mark II Studies* and the January 25, 2013 Nuclear Energy Institute's letter to Chairman Macfarlane regarding filtering strategies and filtered vents. In a Commissioners' Assistants briefing, the staff should provide their perspectives on the BWROG report and the NEI letter.

The staff should provide the Commission via a Commissioners' Assistants Note an explanation of how Option 4 addresses fewer accident scenarios than Option 3 (in SECY-12-0157, dated 11/26/12, Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II Containments).

Per Commissioners' request during the meeting, the staff subsequently provided the Commission with Nuclear Energy Institute document NEI-06-12 "B.5.b Phase 2 & 3 Submittal Guideline, Revision 2," which the staff endorsed as meeting the requirements of 10 CFR 50.54(hh). Specifically, the staff noted the sections of the NEI guideline that address the ability to pump water into the containment drywell sufficient to cool core debris in the event of an ex-vessel core melt. This guideline notes the performance attributes of equipment and systems for cooling core debris and scrubbing fission products.

Additional Commission direction will be provided in the SRM for SECY-12-0157.

cc: Chairman Macfarlane

Commissioner Svinicki

Commissioner Apostolakis

Commissioner Magwood

Commissioner Ostendorff

OGC

CFO

OCA

OIG

OPA

Office Directors, Regions, ACRS, ASLBP (via E-Mail)

PDR