



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, DC 20555 - 0001

ACRSR-2215

October 13, 2006

MEMORANDUM TO: Luis A. Reyes  
Executive Director for Operations  
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FROM: John T. Larkins, Executive Director  
Advisory Committee on Reactor Safeguards

SUBJECT: SUPPLEMENT 1 TO FINAL SAFETY EVALUATION REPORT FOR  
NORTH ANNA EARLY SITE PERMIT (ESP) APPLICATION

During the 536<sup>th</sup> meeting of the Advisory Committee on Reactor Safeguards, October 4-6, 2006, the Committee considered the changes reflected in Revisions 6, 7, 8, and 9 of Dominion Nuclear North Anna LLC (Dominion) application for an early site permit (ESP). In its revised application, Dominion proposed: (1) to change the once-through cooling system planned for Unit 3 in previous versions of the safety site analysis report (SSAR) to a closed-cycle system; (2) to increase the power levels for Units 3 and 4 to match the designed maximum power (4500 MWt) of a General Electric Economic and Simple Boiling-Water Reactor (ESBWR), one of the reactor designs included in the plant parameter envelope; and (3) to reduce the bounding value for tritium activity release (associated with the ACR-700 design), to ensure that the tritium concentration in liquid effluent releases is less than both the 10 CFR Part 20 limit and the limit set in the EPA drinking water standards. By letter dated September 29, 2006, the staff transmitted Supplement 1 to its final Safety Evaluation Report (SER), which addresses Revisions 6 through 9 of the North Anna ESP application, to the ACRS for possible review.

The Committee decided that the proposed changes do not affect its previous conclusions and recommendations with regard to issuing the ESP, and that additional review of this document prior to issuance is not necessary.

References:

1. Memorandum dated September 29, 2006, from David B. Matthews, Director, Division of New Reactor Licensing, NRR, to John T. Larkins, Executive Director, ACRS, Subject: Transmittal of Supplement 1 to Final Safety Evaluation Report for North Anna Early Site Permit (ESP) Application.
2. U.S. Nuclear Regulatory Commission, Final Safety Evaluation Report, "Safety Evaluation Report for an Early Site Permit (ESP) at the North Anna ESP Site," dated September 2005 (NUREG-1835).

cc: A. Vietti-Cook, SECY  
M. Johnson, OEDO  
B. Sosa, OEDO  
J. Lamb, OEDO  
D. Matthews, NRR  
T. Bergman, NRR  
N. Patel, NRR  
S. (Min) Lee, NRR