



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

February 17, 1977

Benard C. Rusche, Director  
Office of Nuclear Reactor Regulation

SUBJECT: ACRS REPORT ON THE NORTH ANNA POWER STATION, UNITS 1 AND 2,  
DATED JANUARY 17, 1977

This memorandum is in response to your letter of January 31, 1977 concerning interpretation of the ACRS report of January 17, 1977 on the North Anna Power Station, Units 1 and 2. The Committee considered your request for clarification during the 202nd ACRS meeting. The members discussed the bases for the Committee's report on the North Anna Station and the comments noted below are reflected in the meeting minutes.

- (1) The Committee concurs with its consultants in the matter of the Stafford fault zone.
- (2) The Committee concurs in general with the recommendation of its consultants that a minimum safe shutdown earthquake (SSE) of 0.2g should ordinarily be utilized for new plants for which construction permit applications are submitted in the future, although the Committee believes that flexibility in this nominal floor is appropriate to allow for special site conditions and specific aspects of plant design for which site dependent spectra may be important or for situations where a sound and non-controversial basis exists for setting lesser criteria.
- (3) The systems to be investigated are those required to accomplish safe shutdown of the reactors and continued shutdown heat removal. The Committee has recommended that such systems have significant margins in the event of the SSE, so that safe shutdown has a high probability of accomplishment, should a lower probability earthquake having a response spectrum somewhat larger than that of the usual broad band spectrum over part of the frequency range occur. Instances in which "current acceptance limits" may be exceeded in such an evaluation may be considered acceptable on a judgment basis.

  
R. F. Fraley  
Executive Director

cc: L. Gossick, EDO  
S. Chilk, SECY