February 10, 2006

Mr. Karl W. Singer
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT, UNIT 1 - TRANSMITTAL OF FINAL ACCIDENT SEQUENCE PRECURSOR ANALYSES REPORT, IR 327-2004-010

Dear Mr. Singer:

Enclosed for your use and information is a copy of the Nuclear Regulatory Commission (NRC) Final Accident Sequence Precursor Report, IR 327-2004-010, for the Sequoyah Nuclear Plant, Unit 1.

NRC Inspection Report 50-327/2004-004 dated October 25, 2004, described an event where Residual Heat Removal Pump 1A failed to start during a surveillance test. The failure was caused by the pump breaker due to binding of the Siemens breaker mechanism operated cell slide assembly (a wear out failure mode). This event was analyzed as a WHITE event by a Phase 3 significant determination process (SDP) analysis in the fall of 2004. In Winter 2004, a significant revision to the simplified plant analysis risk (SPAR) model and the associated equipment reliability data was published. The accident sequence precursor (ASP) analysis used the same condition analysis approach as the SDP and the newer SPAR model, which resulted in a change in core damage probability that is a factor of about 3 lower than the SDP. The difference between the ASP and SDP analyses is the result of ongoing improvements to the SPAR model.

If you have any questions about the analysis, please contact Gary DeMoss of the NRC's Office of Research at 301-415-6225.

Sincerely,

/RA/

Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-327

Enclosure: Final Accident Sequence Precursor Report

cc w/enclosure: See next page

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Mr. Karl W. Singer
Tennessee Valley Authority

SEQUOYAH NUCLEAR PLANT

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