Re: 0 RPB 4-21-05



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

April 20, 2005

2/25/05 70 FR 9393

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Rules and Directives Branch Division of Administrative Services Office of Administration U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

Gentlemen:

TENNESSEE VALLEY AUTHORITY (TVA) - COMMENTS ON DRAFT REGULATORY GUIDE (DG) -1137 – GUIDANCE FOR LIGHTNING PROTECTION FOR NUCLEAR POWER PLANTS (70 FR 9393-9394 dated February 25, 2005)

This letter provides TVA's comments on Draft Regulatory Guide (DG) -1137, "Guidelines for Lightning Protection for Nuclear Power Plants." This DG applies to data provided for NRC review of applications for permits and licenses for implementing 10 CFR 50, Appendix A, Criterion 2, "Design Bases for Protection against Natural Phenomena." TVA's comments are provided in the enclosure.

TVA appreciates the opportunity to comment on the proposed draft regulatory guide. If you have any questions, please contact Rob Brown at (423) 751-7228.

Sincerely,

Frédrick C. Mashburn Senior Program Manager Nuclear Licensing

Enclosure cc (Enclosure): U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555-0001

SISP Review Complete Template = ADIN-013

E-RIDS: APR-03 Add C. Antonescu (CEAI)

ENCLOSURE

Comments on Draft Guide (DG)-1137

- The DG does not specifically recognize alternate methods of lightning protection such as Browns Ferry's Dissipation Array System (DAS). The DG provides comments as endorsement and regulatory position, thus, it should further stipulate that it is not intended to preclude or eliminate the possibility of using alternative methods of lightning protection such as the Charge Transfer System (CTS). The CTS would include DAS as currently installed at Browns Ferry. There are applications when the CTS approach must be considered. In fact, many of the locations where the supplier integrated a DAS, conventional lightning rod systems were already provided as outlined in National Fire Protection Association (NFPA) or Institute of Electrical and Electronic Engineers (IEEE).
- 2. Our primary comments are that any guidelines that are generated from the NRC in regard to lightning protection should have some flexibility. This flexibility would allow the end user the opportunity for consideration of alternative methods and the NRC guidelines should, at the very least, reference these alternative methods. This is the same approach that NFPA has reflected in the current standard. In regard to NFPA 780, the latest standard is NFPA 780 2004 edition.
- 3. TVA agrees with the proposed requirements as outlined in the testing and maintenance of the lightning protection systems. These testing, inspection and maintenance requirements would include the conventional and CTS technologies. Further, we agree with the requirements for the integration of strategic surge protection and optimum grounding practices. These are all critical to a properly operating unified lightning protection system that will provide the designed lightning protection capability throughout the life of the system.