

June 14, 2007

MEMORANDUM TO: William Burton, Chief  
Environmental Projects Branch A  
Division of Site and Environmental Reviews  
Office of New Reactors

FROM: Mark D. Notich, Project Manager */RA/*  
Environmental Projects Branch A  
Division of Site and Environmental Reviews  
Office of New Reactors

SUBJECT: MEETING SUMMARY - MAY 22, 2007, TELECONFERENCE TO  
DISCUSS THE SEVERE ACCIDENTS PORTION OF THE VOGTLE  
EARLY SITE PERMIT (ESP) ENVIRONMENTAL REPORT (ER)

ATTENDEES: NRC - William Burton, Brent Clayton, Mark Notich, Barry Zalzman, Jerry  
Wilson, Jonathan Rund, Brett Klukan, Stephanie Coffin, Christian  
Araguas

Southern Nuclear Operating Company (SNC) - Charles Pierce, James  
Davis, Amy Aughtman, Matthew Montz, Stanford Blanton (Blach and  
Bingham LLC), Kathryn Sutton (Morgan Lewis), Steven Franz (Morgan  
Lewis), Andrea Sturdis (Westnghouse), Don Hutchins (Westinghouse),  
Peter Hastings (Duke), Steve Connor (Tetra Tech NUS)

The U.S. Nuclear Regulatory Commission (NRC) staff held a conference call with SNC on Tuesday, May 22, 2007, to discuss several issues associated with the severe accident analysis submitted to the NRC as part of the Vogtle ESP ER. Specifically, the staff stated that the MACCS-2 computer model output files that were provided to the staff on April 11, 2007, did not contain data for the Average Individual Early Fatality Risk and the Average Individual Latent Cancer Fatality Risk. These data points are used by the staff to assess the impacts of severe accidents, an important analysis in fulfilling the staff's National Environmental Policy Act (NEPA) responsibilities in preparing its environmental impact statement (EIS) for the ESP action. SNC was concerned that submitting these two data points would undermine the conclusion in the environmental assessment (EA) regarding the severe accident mitigation design alternatives (SAMDA) analysis supporting the certification of the AP1000 design and its design control document (DCD) by the NRC (see, Docket No. 52-006). The EA provided the basis for issue resolution in the rule governing the AP1000; in particular, Title 10 of the *Code of Federal Regulations* (10 CFR), Part 52, Appendix D, states (see, VI.B.) "The Commission considers the following matter resolved" and includes (see, VI.B.7) "[A]ll environmental issues concerning SAMDAs associated with the information in the NRC's EA for the AP1000 design and Appendix 1B of the generic DCD, for plants referencing this appendix whose site parameters are within those specified in the SAMDA evaluation." SNC also

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questioned why the issue of severe accidents was being addressed in the EIS as opposed to being handled as a safety issue.

The staff provided the context of the Commission's direction to consider the NEPA analysis of SAMDAs in connection with a design proposed for certification. While the impacts of severe accidents and SAMDA evaluations overlap with safety evaluations, in some respects, these discussions were solely within the context of the staff's NEPA review. The assumptions underlying the AP1000 DCR included pessimistic siting factors to demonstrate that the design was robust and could be suitable for a large number of the sites in the U.S. (at approximately 80% of the sites in the country). An ESP/COL applicant referencing a specific design that is certified must demonstrate that its site characteristics (for example, demography and atmospheric dilution factors) fall within the site parameters specified in the design certification EA that provided the SAMDA evaluation. SNC indicated that it provided information in the ER to demonstrate that the actual site characteristics fall within the postulated site parameters.

In its assessment of the impacts of severe accidents, the staff indicated that it disclosed information on the average individual early fatality risk and the average individual latent cancer fatality risk in the three previous ESP EISs. The staff attempted to put these model output values in some context in the EISs. Specifically, the staff compares these calculated values to values in the Commission's 1986 Policy Statement on Safety Goals (see 51 FR 30028, dated August 21, 1986). The staff agreed with SNC that the comparison of these values to the Safety Goals are not part of a safety analysis, but is used to frame the ESP EIS discussion of the impacts of severe accidents. Furthermore, the model output values are not used in the context of the SAMDA evaluation.

Docket No.: 52-011

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