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RULES AND DIRECTIVES  
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NL-11-0298

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

Joseph M. Farley Nuclear Plant  
Edwin I. Hatch Nuclear Plant  
Vogtle Electric Generating Plant  
Comments on Draft NRC Regulatory Issue Summary 2011-XX, "Adequacy of  
Station Electric Distribution System Voltages"  
Docket ID NRC-2011-0013

Ladies and Gentlemen:

In a January 18, 2011 Federal Register Notice (76FR 2924) the Nuclear  
Regulatory Commission (NRC) requested public comments on a Draft NRC  
Regulatory Issue Summary (RIS) 2011-XX, "Adequacy of Station Electric  
Distribution System Voltages".

This letter is to advise that Southern Nuclear Operating Company (SNC)  
endorses the comments submitted by NEI. SNC comments are provided in  
Enclosure 1.

Respectfully submitted,

1/18/11  
76 FR 2924

Sincerely,

*Mark J. Ajluni*

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M. J. Ajluni  
Nuclear Licensing Director

MJA/GAL/lac

Enclosures: 1. Comments on Draft NRC Regulatory Issue Summary 2011-XX  
"Adequacy of Station Electric Distribution System Voltages"  
Docket ID NRC-2011-0013

*SUNSE Review Complete  
Template-ADM-013*

*E-REDS=ADM-03  
Case = K. Miller (KAM 4)*

U. S. Nuclear Regulatory Commission  
NL-11-0298  
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cc: Southern Nuclear Operating Company  
Mr. J. T. Gasser, Executive Vice President  
Mr. L. M. Stinson, Vice President Fleet Operations Support– Farley  
Mr. D. R. Madison, Vice President – Hatch  
Mr. T. E. Tynan, Vice President – Vogtle  
Ms. P. M. Marino, Vice President – Engineering  
RType: CGA02.001

U. S. Nuclear Regulatory Commission  
Mr. L. A. Reyes, Regional Administrator  
Mr. R. E. Martin, NRR Project Manager – Farley, Hatch and Vogtle  
Mr. E. L. Crowe, Senior Resident Inspector – Farley  
Mr. E. D. Morris, Senior Resident Inspector – Hatch  
Mr. M. Cain, Senior Resident Inspector – Vogtle  
Mr. P. G. Boyle, NRR Project Manager

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Enclosure 1

Comments on Draft NRC Regulatory Issue Summary 2011-XX,  
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Comments on Draft NRC Regulatory Issue Summary 2011-XX,  
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ID	Section, Page, Line Number	Comment	Proposed Resolution
1	General	Include a definition of key terms (ex. Normal grid operation, sustained degraded voltage)	
2	General	The RIS does not address completely the specific requirements in the PSB-1 (ADAMS Accession No. ML052350520), Arkansas Nuclear One (ADAMS Accession No. ML0311801180), and Millstone (ADAMS Accession No. ML093521388) documents. In some cases specific positions in the above documents were omitted from the RIS.	Include missing positions especially those related to determining minimum expected offsite system voltages and testing.
3	General	The RIS lacks adequate guidance to perform the requested calculation(s) without additional interpretations by the licensee and auditors as to the intent of the provided guidance.	Provide a guideline with examples on how to perform the calculation(s) including expected assumptions, other considerations, and criteria to be used for acceptance.

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4	General	<p>The RIS provides some examples of plants that have NRC reviewed and approved analyses and goes on to point out that "backfit rule" was applied because the staff believed the sites were not in compliance with regulations even though they had approved the analysis. How is a licensee who has an NRC approved or acceptable analysis supposed to know that their analysis is no longer acceptable? The RIS needs more clarification with regard to individual plant licensing bases if it is to be useful to licenses.</p> <p>Some plants have installed degraded grid alarm systems and, at the staff request, included them in Unit Operating Technical Specifications. Required operator actions related to degraded grid conditions are specified in the bases and procedures. The RIS does not discuss this approach.</p> <p>There are a number of plants that have URIs related to this issue. Issuance of this RIS could be used by inspectors to close the URIs to violations without regard to plant specific licensing bases, resulting in regulation by inspection..</p>	

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5	Ref."Summary of Issues", pg. 6, Item 1. "Degraded Voltage Relaying Design Calculations", Line 5.	<p>The RIS states "The Class 1E buses should separate from the offsite power system within a few seconds if an accident occurs coincident with sustained degraded voltage conditions."</p> <p>GDC 17 describes the requirements for onsite and offsite power systems. One of its requirements is that they each provide sufficient capacity and capability to mitigate postulated events. The events are described in Chapter 15 "Accident Analysis". These analyses assume Loss of Offsite Power simultaneous with the event. They do not require assuming degraded grid voltage condition prior to an event occurring. In addition because of FERC and NERC requirements for voltage control, the likelihood of a chapter 15 accident occurring concurrent with a serious degraded grid voltage condition is not believed to be credible.</p>	Remove or clarify this statement since proper offsite system design and operation renders such simultaneous postulated events as incredible.
6	Ref."Summary of Issues", pg. 6, Item 1. "Degraded Voltage Relaying Design Calculations", Line 7.	<p>The RIS states "During normal plant operation, the Class 1E safety related buses should automatically separate from the power supply within a short interval (typically less than 60 seconds) if sustained degraded voltage conditions are detected."</p> <p>During normal plant operation (i.e. non LOCA), the degraded grid relay settings may be overly conservative. Therefore automatic separation from the preferred power supply may not be desired.</p>	Transmission Operators should be allowed time to correct the degraded voltage condition while Plant Operators monitor the safety bus voltages for adequate voltage.

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7	Summary of Issues, DVR Setting Design Calculations, pg. 6 – 7, Beginning at the bottom of page 6.	<p>The RIS states "In this manner, the DVR ensures adequate operational (starting and running) voltage to all safety related equipment, independent of voltage controlling equipment external to the plant safety related electrical distribution system. For the purposes of this calculation, no credit should be taken for voltage controlling equipment external to the Class 1E distribution system such as automatic load tap changers and capacitor banks."</p> <p>This statement needs to be clarified.</p>	<p>This statement needs to be clarified to allow reasonable assumptions for the status of equipment external to the Class 1E distribution system. For example it is unclear how to perform motor starting calculations without taking credit for some Non 1E voltage controlling equipment. Additionally, normal Transmission grid switching to prepare for the next contingency to maintain minimum expected transmission system voltages should be allowed.</p>
8	Ref. Summary of Issues, Last paragraph of "DVR Setting Design Calculations", pg. 7.	<p>The discussion on time delays does not provide adequate criteria for time delay selections.</p>	<p>Clarify.</p>
9	Summary of Issues, Guidelines for voltage drop calculations, item (f) pg. 8	<p>After paragraph (f) the RIS leaves out the guidance in GL 79-36 concerning minimum expected values (item 6 of enclosure 2) was omitted from the RIS guidance.</p>	<p>Add item 6 of enclosure 2 in GL 79-36 to the RIS.</p>