



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 15, 2017

LICENSEE: Southern Nuclear Operating Company.

FACILITY: Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2

SUBJECT: SUMMARY OF JANUARY 18, 2017, PRE-SUBMITTAL PUBLIC MEETING  
WITH SOUTHERN NUCLEAR OPERATING COMPANY, INC. TO DISCUSS  
THE DEGRADED GRID VOLTAGE PROPOSED LICENSE AMENDMENT  
REQUEST (CAC NOS. MF9043 AND MF9044)

On January 18, 2017, a Category 1 pre-submittal public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Southern Nuclear Operating Company, Inc. (SNC, the licensee) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss with the SNC staff its planned license amendment submittal regarding degraded grid voltage at the Edwin I. Hatch Nuclear Plant (HNP), Unit Nos. 1 and 2.

The meeting notice and agenda, dated January 4, 2017, are located at Agencywide Documents Access and Management System (ADAMS) Accession No. ML17009A420. The licensee's presentation slides are available in ADAMS at Accession No. ML17009A383. A list of meeting attendees is provided in the enclosure to this meeting summary.

#### Meeting Summary

After introductions, the licensee proceeded to the slide presentation, first providing an overview of the license amendment request (LAR). The NRC staff first inquired about which industrial standards and NRC branch technical position (BTP) that the licensee followed to determine specifications for its replacement transformer. The NRC staff suggested that in the planned LAR, the licensee state the current licensing basis and (1) if the plants are currently in compliance with both their licensing basis and Title 10 of the *Code of Federal Regulations*, Part 50, Appendix A, "General Design Criteria," and (2) which guidance they used to develop the LAR.

The NRC staff noted that the recent Joseph M. Farley Nuclear Plant (FNP) degraded grid voltage LAR would provide a useful model to follow when developing the same LAR for HNP. SNC stated that they incorporated all of the lessons learned from the FNP LAR into the HNP LAR.

During the discussion of slide 3, the NRC staff suggested that the licensee clearly identify whether the stated voltage value used in the supporting calculations is the minimum expected voltage (MEV) or the minimum required voltage (MRV). Applications from other licensees in the past were sometimes not clear and resulted in additional requests for additional information to clarify.

The NRC staff questioned whether the size of the to-be-installed transformer and its electrical capacity is larger (i.e., not a replacement-in-kind) and suggested that the review may take

longer. The NRC staff suggested that the correct reviews and calculations be described in the submittal to account for this larger electrical capacity.

The NRC staff inquired if the new degraded voltage relays had harmonic filters installed. Previous operating experience has shown that relays with no harmonic filters are susceptible to harmonics that could potentially offset the relay setpoints. The licensee stated that the new relays have harmonic filters, so there are no foreseeable issues.

Because the relay alarm function is proposed to be removed from the HNP technical specifications in the upcoming outages, the NRC staff suggested that the licensee should document the regulatory history behind the original addition of the relay alarm function to the technical specifications.

The NRC staff discussed the use of guidance for developing the LAR. The NRC questioned portions of the current guidance in NEI 15-01, "An Analytical Approach for Establishing Degraded Voltage Relay (DVR) Settings," (ADAMS Package Accession No. ML15089A327) so its use would incur greater scrutiny than using the approved guidance of RIS 2011-12, Revision 1, "Adequacy of Station Electrical Distribution System Voltages," (ADAMS Accession No. ML113050583) and BTP 8-6, "Adequacy of Station Electrical Distribution System Voltages," (ADAMS Accession No. ML070710478).

The NRC staff stated that the Palo Verde Nuclear Generating Station degraded grid voltage LAR (ADAMS Accession No. ML16096A337) provided sufficient justification for their proposed change and could be used as an example LAR.

Finally, the licensee described a further upcoming LAR to increase the technical specification out of service completion times for a start up transformer or offsite power source. SNC is proposing to submit the LAR in the third quarter of 2017.

No members of the public were in attendance. No Public Meeting Feedback Forms were received.

Please direct any inquiries to me at 301-415-3229 or [Michael.Orenak@nrc.gov](mailto:Michael.Orenak@nrc.gov).



Michael D Orenak, Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366

Enclosure:  
List of Attendees

LIST OF ATTENDEES  
JANUARY 18, 2017, PUBLIC MEETING WITH  
SOUTHERN NUCLEAR OPERATING COMPANY, INC.  
REGARDING THE DEGRADED GRID VOLTAGE PROJECT  
EDWIN I. HATCH NUCLEAR PLANT, UNIT NOS. 1 AND 2

<b>NAME</b>	<b>ORGANIZATION</b>
Michael Orenak	U.S. Nuclear Regulatory Commission (NRC)
Pete Snyder	NRC
Tania Martinez-Navedo	NRC
Roy Mathew	NRC
Ken McElroy	Southern Nuclear Operating Company (SNC)
Pamela Burns	SNC
Brian McGregor	SNC
Nicole Jackson	SNC
Tim Piette	SNC (telephone)
R.G. Reddy	SNC (telephone)
Doug Parker	SNC (telephone)
James Flowers	SNC (telephone)
Jeff Wiebelt	SNC (telephone)
John Minley	SNC (telephone)
Haissam Awar	Enercon (telephone)
Eric Praser	Enercon (telephone)
Jason Bellamy	Enercon (telephone)
Robin Smith	Enercon (telephone)
Aaron Smith	Enercon (telephone)
Chinmay Patel	Enercon (telephone)
Nader Eldeiry	Enercon (telephone)
Lexi Kacic	Enercon (telephone)
Anthony Brossi	EPM (telephone)
Jeff Quinn	EPM (telephone)

Enclosure

SUMMARY OF JANUARY 18, 2017, PUBLIC MEETING WITH SOUTHERN NUCLEAR  
OPERATING COMPANY, INC. TO DISCUSS THE DEGRADED GRID VOLTAGE PROPOSED  
LICENSE AMENDMENT REQUEST (CAC NOS. MF9043 AND MF9044) DATED  
FEBRUARY 15, 2017

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**ADAMS Accession No.: ML17030A437**

OFFICE	NRR/DORL/LPL2-1/PM	NRR/DORL/LPL2-1/LA	NRR/DE/EEEB/BC
NAME	MOrenak	KGoldstein	JZimmerman
DATE	02/13/17	02/09/17	02/14/17
OFFICE	NRR/DORL/LPL2-1/BC	NRR/DORL/LPL2-1/PM	
NAME	MMarkley (SWilliams for)	MOrenak	
DATE	02/15/17	02/15/17	

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