

**CHRISTOPHER E. EARLS**  
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November 30, 2015

Mr. John W. Lubinski  
Director, Division of Engineering  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** NEI 15-01, "An Analytical Approach for Establishing Degraded Voltage Relay (DVR) Settings,"  
Revision 1, November 2015

**Project Number: 689**

Dear Mr. Lubinski,

On behalf of the nuclear energy industry, the Nuclear Energy Institute (NEI)<sup>1</sup> would like to submit the attached revision to NEI 15-01 "An Analytical Approach for Establishing Degraded Voltage Relay (DVR) Settings", dated November 2015 for review and consideration in the development of the regulatory guide that you described in your August 10, 2015 letter (ADAMS Accession No. ML15189A081).

In that letter the Staff also indicated that the proposed regulatory guidance document would be used to address issues with under-voltage conditions that were not addressed in the Regulatory Issue Summary 2011-12. In our continued effort to work with the Staff and other external stakeholders, NEI has revised NEI 15-01 to specifically reference applicable sections of IEEE Standard 741-2007 "IEEE Standard Criteria for the Protection of Class 1E Power Systems and Equipment in Nuclear Power Generating Stations". The NEI guidance document was always intended to be used in conjunction with IEEE 741-2007. While the goal of the document was to provide at least one approach that can be used to establish the settings for the degraded voltage protection scheme in order to demonstrate that the design basis of safety-related equipment (running and starting voltage requirements) is in accordance with NRC regulatory guidance documents, it does not contain all of the factors that must be considered. By using these two documents in conjunction, it is clear that the Staff should have what it needs to support resolution of the low and degraded voltage issues. These documents should also support the development of a guidance document through which licensees would have clear methodology to meet GDC-17 criteria for low and degraded voltage issues.

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<sup>1</sup> NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

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Thank you in advance for consideration of this document. If you or the staff has any questions, please contact me, Gordon Clepton (202.739.8086; [gac@nei.org](mailto:gac@nei.org)) or Steven Hutchins (202.739.8132; [sph@nei.org](mailto:sph@nei.org)).

Sincerely,

A handwritten signature in black ink that reads "Chris Earls". The signature is written in a cursive style with a long, sweeping underline.

Christopher E. Earls

Attachment

c: Mr. Jacob Zimmerman, NRR/DE/EEEB, NRC  
Ms. Tania Martinez-Navedo, NRR/DE/EEEB, NRC  
Dr. Matthew Humberstone, NRR/DPR/PLPB, NRC  
NRC Document Control Desk