



Steve L. Smith
Vice President Engineering

May 20, 2020
ET 20-0008

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

- References:
- 1) NEI Letter, dated October 9, 2013, from A. R. Pietrangelo to USNRC, "Industry Initiative on Open Phase Condition"
 - 2) Letter ET 14-0005, dated February 3, 2014, from J. P. Broschak, WCNOG, to USNRC, "Wolf Creek Nuclear Operating Corporation's Response to Request for Additional Information Regarding Bulletin 2012-01, 'Design Vulnerability in Electric Power System'"
 - 3) NEI Letter, dated March 16, 2015, from A. R. Pietrangelo to USNRC, "Industry Initiative on Open Phase Condition, Revision 1"
 - 4) NEI Letter, dated September 20, 2018, from B. Pitesa to USNRC, "Industry Initiative on Open Phase Condition, Revision 2"
 - 5) Letter ET 18-0032, dated December 7, 2018, from S. L. Smith, WCNOG, to USNRC, "Wolf Creek Nuclear Operating Corporation Change of Date for Full Implementation of Open Phase Detection System"
 - 6) NEI Letter, dated June 6, 2019, from D. E. True to USNRC, "Industry Initiative on Open Phase Condition, Revision 3"

Subject: Docket No. 50-482: Wolf Creek Nuclear Operating Corporation update for Full Implementation of Open Phase Detection System

Commissioners and Staff:

The purpose of this letter is to notify the NRC of the completion of the 24 month extended monitoring period discussed in Reference 5. In addition, consistent with the excerpt from Reference 6 below, WCNOG is notifying the NRC of the completed performance of the application of risk screening techniques to determine the risk associated with the Open Phase System remaining in alarm only and relying on proper operator action. The results of the PRA analysis support credit for manual operator action to isolate an Open Phase Condition from the plant emergency buses. Consistent with the guidance in Reference 6, the conclusions support a risk-informed decision not to implement the automatic trip function of the Open Phase Detection System based on it providing only a small risk improvement over the current Open Phase Detection System alarm with operator action.

Summary of Previous Actions:

In Reference 1, the Nuclear Energy Institute (NEI) informed the Nuclear Regulatory Commission (NRC) that the industry had formally approved an initiative to address the open phase condition (OPC) in off-site power circuits.

In Reference 2, Wolf Creek Nuclear Operating Corporation (WCNOC) agreed to the generic schedule provided in the NEI Industry OPC Initiative. Subsequent to discussions between NRC staff and industry representatives, NEI submitted Revision 1 of the OPC Initiative (Reference 3). This provided a revised timeline for implementation of the OPC Initiative allowing plants adequate time for completion of modifications, associated monitoring, and licensing basis changes.

Following the submission of Reference 3, data collected indicated the need for an extended monitoring period. Therefore, Reference 4 provided an extended monitoring period.

In Reference 5, WCNOC notified the NRC of the intent to extend the monitoring period.

Reference 6 provided an alternative to enabling the automatic isolation of OPCs as shown below:

"As an alternative to enabling the automatic isolation of OPCs, the application of risk screening techniques (see Attachment 1) can be performed to determine that the risk associated with an OPC event is significantly reduced through the implementation of detection circuits. Completion of the risk analysis under the boundary conditions in Attachment 1 will have been performed by the completion of the monitoring period."

This letter contains no commitments. If you have any questions concerning this matter, please contact me at (620) 364-4093, or Ron Benham at (620) 364-4204.

Sincerely,

A handwritten signature in black ink, appearing to read 'Steve L. Smith', with a stylized flourish at the end.

Steve L. Smith

SLS/rlt

cc: S. A. Morris (NRC)
N. O'Keefe (NRC)
B. K. Singal (NRC)
Senior Resident Inspector (NRC)