

MAY 07 2007
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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Hope Creek Generating Station
Facility Operating License No. NPF-57
NRC Docket No. 50-354

Subject: Response to NRC Generic Letter 2007-01, "Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients"

Reference: Letter from Michael J. Case (NRC) to Addressees, "NRC Generic Letter 2007-01: Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients," dated February 7, 2007

On February 7, 2007, the NRC issued Generic Letter (GL) 2007-01, "Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients" (i.e., Reference). The GL requested that all holders of operating licenses submit a written response within 90 days in accordance with 10 CFR 50.54, "Conditions of licenses," paragraph (f). The GL requested the following information.

- (1) Provide a history of inaccessible or underground power cable failures for all cables that are within the scope of 10 CFR 50.65 (the Maintenance Rule) and for all voltage levels. Indicate the type, manufacturer, date of failure, type of service, voltage class, years of service, and the root causes for the failure.
- (2) Describe inspection, testing and monitoring programs to detect the degradation of inaccessible or underground power cables that support EDGs, offsite power, ESW, service water, component cooling water and other systems that are within the scope of 10 CFR 50.65 (the Maintenance Rule).

Attachment 1 provides the PSEG Nuclear LLC (PSEG) 90-day response to the requested information for Hope Creek Generating Station.

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There are no regulatory commitments made in this letter. Should you have any questions concerning this letter, please contact Jamie Mallon at (610) 765-5507.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 5/7/07
(Date)

Sincerely,



George Barnes
Site Vice President
Hope Creek Generating Station

Attachment:

90-Day Response to NRC Generic Letter 2007-01 for Hope Creek Generating Station

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Records Management

ATTACHMENT 1

90-Day Response to NRC Generic Letter 2007-01 for Hope Creek Generating Station

On February 7, 2007, the NRC issued Generic Letter (GL) 2007-01, "Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients." The GL requested that all holders of operating licenses for nuclear power reactors submit a written response within 90 days in accordance with 10 CFR 50.54, "Conditions of licenses," paragraph (f). The 90-day response to the information requested by the NRC in GL 2007-01 is provided below for Hope Creek Generating Station.

NRC Request 1

Provide a history of inaccessible or underground power cable failures for all cables that are within the scope of 10 CFR 50.65 (the Maintenance Rule) and for all voltage levels. Indicate the type, manufacturer, date of failure, type of service, voltage class, years of service, and the root causes for the failure.

Response

A review has been completed and no history of failures of inaccessible or underground power cables that are within the scope of 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," have been identified. This review examined the plant corrective action program, Maintenance Rule database, maintenance records, interviews with cognizant personnel, and a review of the circuit and raceway schedules to identify power cable failures. The scope of the review included alternating current power distribution cables with voltages from 480 VAC to 13,800 VAC. This represents our best effort in that data of this nature was not necessarily recorded in a means that was conducive to identifying cable failures.

NRC Request 2

Describe inspection, testing and monitoring programs to detect the degradation of inaccessible or underground power cables that support EDGs, offsite power, ESW, service water, component cooling water and other systems that are within the scope of 10 CFR 50.65 (the Maintenance Rule).

Response

A representative sample of cables are periodically monitored as part of testing selected rotating equipment. Testing is performed using Maintenance Procedure SH.MD-GP.ZZ-0011(Q), Meggering of Rotating Electrical Equipment. These tests are generally performed from the switchgear to the motor thus encompassing the associated power feed cable. Megger testing for rotating equipment, greater than or equal to 4.16KV, is initially performed with the power feeder cable connected. If megger testing results were not within allowable tolerances, the system engineer would be notified and corrective actions taken.

The PSEG Maintenance Procedure does not monitor low voltage cables for degradation. As evidenced by the failure history, there is no indication that there are issues associated with low voltage power cables. Note that a portion of the Hope Creek cables are unshielded and, as such, the testing methodologies identified in the GL (i.e., partial discharge, time domain

ATTACHMENT 1
90-Day Response to NRC Generic Letter 2007-01 for Hope Creek Generating Station

reflectometry, dissipation factor, and very low frequency alternating current) would not be applicable.

Hope Creek Generating Station has had no history of failures of power cables. As such, Hope Creek Generating Station is using the screening methodology described above to assess the condition of a representative population of medium voltage cables.