

**Britt T. McKinney**  
Sr. Vice President & Chief Nuclear Officer

**PPL Susquehanna, LLC**  
769 Salem Boulevard  
Berwick, PA 18603  
Tel. 570.542.3149 Fax 570.542.1504  
btmckinney@pplweb.com



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U. S. Nuclear Regulatory Commission  
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**SUSQUEHANNA STEAM ELECTRIC STATION  
NRC GENERIC LETTER 2007-01  
RESPONSE SUPPLEMENT  
PLA-6307**

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**Docket Nos. 50-387  
and 50-388**

- References:*
- 1) *NRC Generic Letter 2007-01: "Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients," dated February 7, 2007.*
  - 2) *PLA-6206, Mr. B. T. McKinney (PPL) to Document Control Desk (USNRC), "Response to NRC Generic Letter 2007-01 Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients," dated May 4, 2007.*

Pursuant to 10 CFR 50.54(f), Reference 2 provided PPL Susquehanna, LLC (PPL) site specific information in response to Reference 1.

The purpose of this letter is to provide supplemental information to the Reference 2 responses. This supplemental information was verbally requested by the Nuclear Regulatory Commission (NRC) staff during a teleconference between PPL and NRC on November 8, 2007.

There are no new regulatory commitments contained herein as a result of this additional information.

If you have any questions, please contact Mr. Duane L Filchner at (610) 774-7819.

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

Executed on: 12/17/07

  
B. T. McKinney

A127  
NRR

Attachment: PPL Response to Request for Supplemental Information

Copy: NRC Region I

Mr. R. V. Guzman, NRC Sr. Project Manager

Mr. R. Janati, DEP/BRP

Mr. F. W. Jaxheimer, NRC Sr. Resident Inspector

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**Attachment to PLA-6307  
PPL Response to  
Request for Supplemental Information**

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**NRC Question 1**

The U. S. Nuclear Regulatory Commission (NRC) staff has received the cable failure history for Susquehanna Steam Electric Station (SSES) in response to Generic Letter (GL) 2007-01, "Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients." During its review, the licensee found no in-service failures of inaccessible or underground power cables, within the scope of Title 10 of the Code of Federal Regulations (10 CFR), Section 50.65, Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants (Maintenance Rule). Testing failures are also within the scope of GL 2007-01. Therefore, if cables failed to meet testing acceptance criteria and are within the scope of the GL, provide the data for each cable as requested in GL 2007-01.

**PPL Response:**

Although not specifically stated in Reference 2, which is PPL's response to GL 2007-01, cable testing failures were considered in addition to in-service cable failures. There were no cable failures experienced at SSES during performance of actual testing or that were the result of the evaluation of cable test data. The review discussed in response to Question 1 in Reference 2 also included consideration of cable testing.

**NRC Question 2**

The licensee stated that SSES had no current tests of the emergency diesel generator cables connected to the safety-related 4.16 kV buses and that these cables were not normally energized. If these cables are within the scope of the GL (i.e., if they are inaccessible or underground power cables within the scope of 10 CFR 50.65), provide an explanation for why these cables are not included the SSES Preventive Maintenance Program for medium-voltage power cable testing, or state why the cables are not within the scope of the GL.

**PPL Response:**

PPL agrees that the diesel generator cables are "inaccessible or underground power cables within the scope of 10 CFR 50.65". PPL performs cable testing even though it does not have a "cable testing" requirement as part of the SSES preventive maintenance program. Typically, insulation power factor testing is conducted, at the frequency discussed in Reference 2, as a part of the complete circuit test that includes the breaker, cable, and the load. This test configuration minimizes the need to determinate and reterminate the affected cables.

The routing of the 4 kV diesel generator cables from each of the diesel generators to its associated 4 kV switchgear (located in the reactor buildings) passes through only one manhole. The ductbanks from the diesel generator bays to the manholes are sloped such that water would drain from the ductbank to the manhole. The ductbanks from the manholes to the reactor buildings are sloped such that water would drain to the reactor buildings. Since these ductbanks are encased in concrete, water intrusion into the conduits containing diesel generator cables would be from the manhole. Visual inspections have not revealed any evidence that water in the manholes has reached the elevation of the medium voltage diesel generator cables, located at the highest elevation of the manholes. This provides assurance that these cables have never been submerged.

Therefore, the diesel generator cables are within the scope of Generic Letter 2007-01. However, there is no current requirement for cable testing in the SSES Preventive Maintenance program.