PHILADELPHIA ELECTRIC COMPANY

LIMERICK GENERATING STATION

P. O. BOX A

SANATOGA, PENNSYLVANIA 19464

September 1, 1988

Mr. Willian T. Russell
Administrator
Region I
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: Special Reporting Requirement
for Inoperable Meteorological Towers
at Limerick Generation Station

Reference: Technical Specification 3.3.7.3 and 6.9.2

Dear Mr. Russell:

This special report is being submitted pursuant to the requirements of Limerick Technical Specifications 3.3.7.3 and 6.9.2 which state:

METEOROLOGICAL MONITORING INSTRUMENTATION:

3.3.7.3 The meteorological monitoring instrumentaticn channels shown in Table 3.3.7.3-1 shall be OPERABLE.

4.3.7.3 Each of the above required meteorological monitoring instrumentation channe.s shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.7.3-1.

APPLICABILITY: At all times.

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ACTION:

a. With one or more meteorological monitoring instrumentation channels inoperable for more than 7 days, prepare and submit a Special Report to the commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the instrumentation to OPERABLE status.

b. The provision of Specification 3.0.3 and 3.0.4 are not applicable.

SPECIAL REPORTS:

6.9.2 Special Reports shall be submitted to the Regional Administrator of the Regional Office of the NRC within the time period specified for each report.

DESCRIPTION OF EVENT:

At 1300 hours Eastern Standard Time, on August 17, 1988 during a severe thunder storm, the wind speed, wind direction and the air temperature difference sensors on both the primary and secondary meteorological towers were damaged when struck by lightning and declared inoperable. The operability of the meteorological monitoring instrumentation ensures that sufficient meteorological data is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public.

The restoration of meteorological tower instrumentation operability has been delayed because of further inclement weather and the extensive damage caused by the storm.

CONSEQUENCES OF THE EVENT:

There is no impact on normal operations as a result of this condition because routine operational functions are not affected. The capability for the dose assessment team to receive valid meteorological data is not degraded. Should preliminary dose assessment be necessary, Peach Bottom Atomic Power Station meteorological data can be used. The Shift Technical Advisors and the Dose Assessment Team Leaders have been informed to request all data from the Peach Bottom Sensors until the site instrumentation is operable. As a secondary source, meteorological data can also be obtained from the National Weather Service Station in Philadelphia, PA. In response to any alarms in the Control Room which require calculating offsite dose, there is an available procedure, "RMMS-203 Emergency Gaseous Dose Calculations - All Manual Mode," which can evaluate offsite doses when meteorological data from the site instrumentation is unavailable. Therefore, a detailed analysis of dose assessment can still be performed even though the site instrumentation tower is inoperable.

CAUSE OF EVENT:

The meteorological tower instrumentation became inoperable when lightning struck both towers during a thunder storm resulting in severe damage to the electronics associated with the instrumentation. This is evidenced by the widespread damage and burned components on the electronic circuit cards.

CORRECTIVE ACTIONS

The primary meteorological tower wind speed and wind direction sensors for the 30 feet elevation were returned to service on August 23, 1988 at 1652 hours. The primary meteorological tower wind speed and wind directions sensors for the 175 feet elevation were returned to service on August 26, 1988 at 1606 hours. The Air Temperature Difference Sensors on primary meteorological tower elevation 26 and 266 feet, however, are currently being replaced and are expected to be returned to service by September 2, 1988. This will satisfy the minimum number of instruments required by Tech. Spec. 3.3.7.3. Work will proceed on the secondary meteorological tower instrumentation immediately following completion of the primary meteorological tower instrumentation.

Should you require additional information, please do not hesitate to contact us.

Very truly yours,

M. J. McCormick, Jr.
Plant Manager
Limerick Generating Station

JKP:sc

cc: Addressee
T. J. Kenny, USNRC Senior Resident Inspector