

ATTACHMENT 1

LIMERICK GENERATING STATION
UNITS 1 AND 2

DOCKET NOS.

50-352

50-353

LICENSE NOS.

NPF-39

NPF-85

TECHNICAL SPECIFICATIONS CHANGE REQUEST

NO. 92-05-0

"increased Surveillance Interval
For The Reactor Protection System
Electrical Power Monitoring Channels."

Supporting Information for Changes - 3 PAGES

PECO Energy Company, licensee under Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, requests that the Technical Specifications (TS) contained in Appendix A to the Operating Licenses be amended as proposed herein, to increase the surveillance interval for the functional test of the Reactor Protection System (RPS) electrical power monitoring channels, contained in TS section 4.8.4.3.a, from every six (6) months to each time the plant is in cold shutdown for a period of 24 hours, unless the test was performed in the previous six months. This TS Change Request is based on the guidance set forth in NRC Generic Letter 91-09 "Modification Of Surveillance Interval For The Electrical Protective Assemblies In Power Supplies For The Reactor Protection System."

The proposed changes to the TS pages are indicated by a vertical bar in the margin of the affected TS pages. The TS pages showing the proposed changes are contained in Attachment 2.

We request that, if approved, the amendment to the LGS, Unit 1 and Unit 2 TS be effective upon issuance.

This submittal provides a discussion and description of the proposed TS changes, a Safety Assessment of the proposed TS changes, Information Supporting a Finding of No Significant Hazards Consideration, and Information Supporting an Environmental Assessment.

Discussion and Description of the Proposed Changes

These proposed Limerick Generating Station, Unit 1 and Unit 2, Technical Specifications changes involve increasing the surveillance interval (i.e., reducing the test frequency) for the functional test of the Reactor Protection System electrical power monitoring channels, contained in TS section 4.8.4.3.a, from every six (6) months to each time the plant is in cold shutdown for a period of 24 hours, unless the test was performed in the previous six months. These changes eliminate the need to test the electrical power monitoring channels during power operation and thereby reduce the possibility of inadvertent challenges to the plant protection systems.

These proposed changes are in accordance with NRC Generic Letter 91-09 "Modification Of Surveillance Interval For The Electrical Protective Assemblies In Power Supplies For The Reactor Protection System."

Safety Assessment

These proposed Limerick Generating Station, Unit 1 and Unit 2, Technical Specifications changes involve increasing the surveillance interval for the functional test of the Reactor Protection System electrical power monitoring channels, contained in TS section 4.8.4.3.a, from every six (6) months to each time the plant is in cold shutdown for a period of 24 hours, unless the test was performed in the previous six months. If approved, this request would eliminate the need to test the RPS electrical power channels during power operation and thereby reduce the possibility of inadvertent challenges to the protection system.

The design, function, and operation of the RPS system and its Electrical Protective Assemblies (EPAs) are not altered by this activity. The proposed changes are in accordance with the recommendations of Generic Letter 91-09 "Modification Of Surveillance Interval For The Electrical Protective Assemblies In Power Supplies For The Reactor Protection System." In addition, the proposed TS changes to increase the interval between tests will not reduce the reliability of the equipment to function as designed based on a review of Limerick Generating Station historical test results.

Information Supporting a Finding of No Significant Hazards Consideration

We have concluded that the proposed changes to the Limerick Generating Station, Units 1 and 2, Technical Specifications, to increase the surveillance interval (i.e., reduce the test frequency) for the functional test of the Reactor Protection System electrical power monitoring channels, do not involve a Significant Hazards Consideration. In support of this determination, an evaluation of each of the three (3) standards, set forth in 10 CFR 50.92 is provided below.

1. The proposed Technical Specifications changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

The Reactor Protection System equipment subject to the proposed Technical Specifications changes are not accident initiators. The Electrical Protective Assemblies (EPAs) specified by these proposed changes are not required to actuate in order to mitigate an accident. The functional test methodology of the RPS electrical power monitoring channels will not be effected by the proposed change in test frequency. The design and function of the EPAs will not be altered and will perform as originally designed.

A review of the RPS electrical power monitoring relays surveillance test history results was performed and supports the proposed TS changes to extend the testing interval. Fifty-one (51) surveillance tests were reviewed, and all the as-found channel calibration results were within the required TS limits. There were identified deficiencies in four (4) of the fifty-one tests performed, however, these four deficiencies did not affect the operability of the RPS EPAs. Based on good historical surveillance test results, we have concluded that the reliability of the equipment is not expected to degrade during the proposed extended test interval. Furthermore, the proposed reduced testing will result in a net decrease in the probability of occurrence of a malfunction of equipment important to safety. These malfunctions would cause an invalid inadvertent trip of the RPS which would impose unnecessary challenges on the affected unit at power. The guidance set forth in Generic Letter 91-09 states "The staff concludes that the benefit to safety of reducing the frequency of testing during power operations more than offsets the risk to safety from relaxing the surveillance requirement to test the EPAs during power operation."

Since the RPS EPAs are not accident initiators, and the design and function of the equipment will not be affected by the proposed TS changes, and the reliability of the equipment is not expected to degrade during the extended test interval, and the changes would reduce the probability of unnecessary challenges to the affected unit, we have concluded that the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed TS changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

The design and function of the RPS EPAs will not be affected by the proposed TS changes. The failure modes of the existing equipment will remain unchanged, and no new accident types will be created. The RPS electrical power monitoring channels' functional test methodology will not be affected by the proposed change in test frequency. Therefore, the proposed TS changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed TS changes do not involve a significant reduction in a margin of safety.

Based on a review of the RPS electrical power monitoring relays surveillance test history results we have concluded that the reliability of the equipment is not expected to degrade during the proposed extended test interval. In addition, the benefit to safety by reducing the frequency of testing during power operation and the attendant possible challenges to safety systems more than offsets any risk to safety from relaxing the surveillance requirements to test the EPAs during power operation. Therefore, the proposed TS changes do not involve a significant reduction in a margin of safety.

Information Supporting an Environmental Assessment

An Environmental Assessment is not required for the Technical Specifications changes proposed by this Change Request because the requested changes to the Limerick Generating Station, Units 1 and 2, TS conform to the criteria for "actions eligible for categorical exclusion," as specified in 10CFR51.22(c)(9). The proposed TS changes do not involve a Significant Hazards Consideration as discussed in the preceding safety assessment section. The proposed changes do not involve a significant change in the types or significant increase in the amounts of any effluent that may be released offsite. In addition, the proposed TS changes do not involve a significant increase in individual or cumulative occupational radiation exposure.

Conclusion

The Plant Operations Review Committee and the Nuclear Review Board have reviewed these proposed changes to the Limerick Generating Station, Units 1 and 2, Technical Specifications, and have concluded that they do not involve an unreviewed safety question, and will not endanger the health and safety of the public.

ATTACHMENT 2

LIMERICK GENERATING STATION
UNITS 1 AND 2

DOCKET NOS.

50-352

50-353

LICENSE NOS.

NPF-39

NPF-85

TECHNICAL SPECIFICATIONS CHANGE REQUEST
NO. 92-05-0

AFFECTED PAGES

UNIT 1

3/4 8-28

UNIT 2

3/4 8-28

ELECTRICAL POWER SYSTEMS

REACTOR PROTECTION SYSTEM ELECTRICAL POWER MONITORING

LIMITING CONDITION FOR OPERATION

3.8.4.3 Two reactor protection system (RPS) electric power monitoring channels for each inservice RPS Inverter or alternate power supply shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one RPS electric power monitoring channel for an inservice RPS Inverter or alternate power supply inoperable, restore the inoperable power monitoring channel to OPERABLE status within 72 hours or remove the associated RPS Inverter or alternate power supply from service.
- b. With both RPS electric power monitoring channels for an inservice RPS Inverter or alternate power supply inoperable, restore at least one electric power monitoring channel to OPERABLE status within 24 hours or remove the associated RPS Inverter or alternate power supply from service.

SURVEILLANCE REQUIREMENTS

4.8.4.3 The above specified RPS electric power monitoring channels shall be determined OPERABLE:

- a. By performance of a CHANNEL FUNCTIONAL TEST each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed in the previous 6 months.
- b. At least once per 18 months by demonstrating the OPERABILITY of overvoltage, undervoltage, and underfrequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic, and output circuit breakers and verifying the following setpoints.
 1. Overvoltage \leq 132 VAC,
 2. Undervoltage \geq 109 VAC,
 3. Underfrequency \geq 57 Hz.

ELECTRICAL POWER SYSTEMS

REACTOR PROTECTION SYSTEM ELECTRICAL POWER MONITORING

LIMITING CONDITION FOR OPERATION

3.8.4.3 Two reactor protection system (RPS) electric power monitoring channels for each inservice RPS Inverter or alternate power supply shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one RPS electric power monitoring channel for an inservice RPS Inverter or alternate power supply inoperable, restore the inoperable power monitoring channel to OPERABLE status within 72 hours or remove the associated RPS Inverter or alternate power supply from service.
- b. With both RPS electric power monitoring channels for an inservice RPS Inverter or alternate power supply inoperable, restore at least one electric power monitoring channel to OPERABLE status within 24 hours or remove the associated RPS Inverter or alternate power supply from service.

SURVEILLANCE REQUIREMENTS

4.8.4.3 The above specified RPS electric power monitoring channels shall be determined OPERABLE:

- a. By performance of a CHANNEL FUNCTIONAL TEST each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed in the previous 6 months.
- b. At least once per 18 months by demonstrating the OPERABILITY of overvoltage, undervoltage, and underfrequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic, and output circuit breakers and verifying the following setpoints.
 1. Overvoltage \leq 132 VAC,
 2. Undervoltage \geq 109 VAC,
 3. Underfrequency \geq 57 Hz.