

**PECO ENERGY**

PECO Energy Company
Nuclear Group Headquarters
965 Chesterbrook Boulevard
Wayne, PA 19087-5691

August 31, 1994

Docket Nos. 50-352
50-353

License Nos. NPF-39
NPF-85

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

Subject: Limerick Generating Station, Units 1 and 2
Technical Specifications Change Request Nos.
94-32-0, 94-36-0, 94-40-0, 94-42-0, 94-44-0
and 94-45-0

Gentlemen:

PECO Energy Company is submitting Technical Specifications (TS) Change Request Nos. 94-32-0, 94-36-0, 94-40-0, 94-42-0, 94-44-0 and 94-45-0 in accordance with 10 CFR 50.90, requesting amendments to the TS (i.e., Appendix A) of Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station, Units 1 and 2, respectively. The proposed TS Changes, which are consistent with the Improved Standard Technical Specifications (NUREG-1433), involve the following:

94-32-0	"Relocation of Turbine Overspeed Protection System Requirements"
94-36-0	"Relocation of Primary Containment Conductor Protection Devices Requirements"
94-40-0	"Feedwater/Main Turbine Trip System Actuation Instrumentation Requirements"
94-42-0	"Permit Operability of Low Pressure Coolant Injection While Aligned to Shutdown Cooling"
94-44-0	"Remove Temperature Requirement for Operational Condition 5"
94-45-0	"Reduce Frequency of Alternate Decay Heat Demonstration"

Information supporting these TS Change Requests is contained in Attachment 1 to this letter, and the proposed replacement pages for the LGS, Units 1 and 2, TS are contained in Attachment 2. This information is being submitted under affirmation, and the required affidavit is enclosed.

We request that, if approved, the amendments to the LGS, Units 1 and 2, TS be issued prior to January 28, 1995, and become effective immediately upon issuance.

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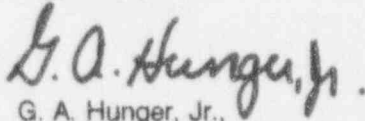
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August 31, 1994
Page 2

If you have any questions, please do not hesitate to contact us.

Very truly yours,

A handwritten signature in dark ink, appearing to read "G. A. Hunger, Jr.", written in a cursive style.

G. A. Hunger, Jr.,
Director - Licensing

Attachments
Enclosure

cc: T. T. Martin, Administrator, Region I, USNRC (w/ attachments, enclosure)
N. S. Perry, USNRC Senior Resident Inspector, LGS (w/ attachments, enclosure)
R. R. Janati, Director, PA Bureau of Radiation Protection, (w/ attachments, enclosure)

COMMONWEALTH OF PENNSYLVANIA

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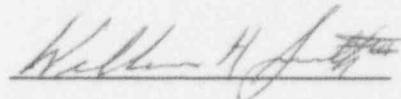
: ss.

COUNTY OF CHESTER

:

W. H. Smith, III, being first duly sworn, deposes and says:

That he is Vice President of PECO Energy Company, the Applicant herein; that he has read the following Technical Specifications Change Request Nos. 94-32-0, 94-36-0, 94-40-0, 94-42-0, 94-44-0, and 94-45-0 for Limerick Generating Station, Units 1 and 2, involving Relocation of Turbine Overspeed Protection System Requirements, Relocation of Primary Containment Conductor Protection Device Requirements, Feedwater/Main Turbine Trip System Actuation Instrumentation Requirements, Permit Operability of Low Pressure Coolant Injection While Aligned to Shutdown Cooling, Remove Temperature Requirement for Operational Condition 5, and Reduce Frequency of Alternate Decay Heat Demonstration, respectively, and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

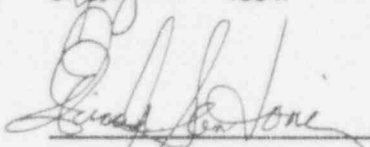


Vice President

Subscribed and sworn to

before me this 20th day

of August 1994.



Notary Public

Notarial Seal
Erica A. Santori, Notary Public
Tredyffrin Twp., Chester County
My Commission Expires July 10, 1995

ATTACHMENT 1

LIMERICK GENERATING STATION

UNITS 1 AND 2

Docket Nos. 50-352
 50-353

License Nos. NPF-39
 NPF-85

- Section 1: Technical Specifications Change Request No. 94-32-0
 "Relocation of Turbine Overspeed Protection System Requirements"
- Section 2: Technical Specifications Change Request No. 94-36-0
 "Relocation of Primary Containment Conductor Protection Device
 Requirements"
- Section 3: Technical Specifications Change Request No. 94-40-0
 "Feedwater/Main Turbine Trip System Actuation Instrumentation
 Requirements"
- Section 4: Technical Specifications Change Request No. 94-42-0
 "Permit Operability of Low Pressure Coolant Injection While Aligned
 to Shutdown Cooling"
- Section 5: Technical Specifications Change Request No. 94-44-0
 "Remove Temperature Requirement for Operational Condition 5"
- Section 6: Technical Specifications Change Request No. 94-45-0
 "Reduce Frequency of Alternate Decay Heat Demonstration"

Supporting Information for Changes - 19 pages

SECTION 1: "RELOCATION OF TURBINE OVERSPEED PROTECTION SYSTEM REQUIREMENTS" (TSR 94-32-0)

PECO Energy Company, Licensee under Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station, Units 1 and 2, respectively, requests that the Technical Specifications (TS) contained in Appendix A to the Operating Licenses be amended as proposed herein, to relocate the requirements of TS 3/4.3.8 "Turbine Overspeed Protection System." This proposed TS change is consistent with criteria delineated in the Improved Standard TS (i.e., NUREG-1433, "Standard Technical Specifications, General Electric Plants BWR/4," dated September 28, 1992). The proposed changes to the TS are indicated by a vertical bar in the margin of TS pages x, 3/4 3-110, and Bases page B 3/4 3-7 for Units 1 and 2. The TS pages showing the proposed change are contained in Attachment 2.

We request that, if approved, the TS change proposed herein be issued by January 28, 1995, and become effective immediately upon issuance of the amendment.

This TS Change Request provides a discussion and description of the proposed TS change, a safety assessment of the proposed TS change, information supporting a finding of No Significant Hazards Consideration, and Information Supporting an Environmental Assessment.

Discussion and Description of the Proposed Change

This TS Change Request will relocate the requirements of TS Section 3/4.3.8 "Turbine Overspeed Protection System" to the Updated Final Safety Analysis Report (UFSAR) and other plant procedures. The method of performing surveillance requirements will be adequately described in plant procedures. The proposed change will allow future administrative control of changes of these requirements without processing a license amendment.

Safety Assessment

This change will relocate the TS requirements to the UFSAR and other PECO controlled documents. All future changes to the UFSAR and these controlled documents are subject to the change control process in the Administrative Controls Section of the LGS TS Section 6.0 including the provisions of 10 CFR 50.59.

The LGS "Turbine Overspeed Protection System" protects the Turbine Generator against overspeed due to failure of the speed control system. The Turbine Generator is not a safety related system, and the Turbine Overspeed Protection System is not used for, nor capable of, detecting an abnormal degradation of a reactor coolant pressure boundary, monitoring a process variable that is an initial condition of a DBA, or being part to the success path that functions or actuates to mitigate a DBA. Based on the above criteria the loss of the Turbine Overspeed Protection System would be a non-significant risk contributor to core damage frequency and offsite releases. The proposed change is consistent with the BWR Improved Standard Technical Specifications (NUREG-1433).

Information Supporting a Finding of No Significant Hazards Consideration

We have concluded that the proposed change to the Limerick Generating Station (LGS), Unit 1 and Unit 2, Technical Specifications (TS), which will relocate requirements from TS to other PECO controlled documents, does 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 TS change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change relocates requirements from the TS, to licensee controlled documents. The licensee controlled documents containing the relocated requirements will be maintained using the provisions of 10 CFR 50.59 and are subject to the change control process in the Administrative Controls Section 6.0 of the TS. Since changes to licensee controlled documents will be evaluated per 10 CFR 50.59, no increase (significant or insignificant) in the probability or consequences of an accident previously evaluated will be allowed. Therefore, this change will not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

This change relocates requirements to licensee controlled documents. This change will not alter the plant configuration (no new or different type of equipment will be installed) or make changes in methods governing normal plant operation. This change will not impose different requirements and adequate control of information will be maintained. This change will not alter assumptions made in the safety analysis and licensing basis. Therefore, this change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed TS change does not involve a significant reduction in a margin of safety.

This change relocates requirements from the TS to licensee controlled documents. This change will not reduce a margin of safety since it has no impact on any safety analysis assumptions. In addition, the requirements to be transferred from the TS to licensee controlled documents are the same as the existing Technical Specifications. Since any future changes to these licensee controlled documents will be evaluated per the requirements of 10 CFR 50.59, no reduction (significant or insignificant) in margin of safety will be allowed. Therefore, this change will not involve a significant reduction in a margin of safety.

The existing requirements for NRC review and approval of revisions, in accordance with 10 CFR 50.59, to these details and requirements proposed for relocation, does not have a specific margin of safety upon which to evaluate. However, since the proposed change is consistent with the BWR Improved Standard Technical Specifications (NUREG-1433 approved by the NRC Staff) and the change controls for proposed relocated details and requirements provide an equivalent level of regulatory authority, revising the TS to reflect the approved level of detail and requirements ensures no reduction to the margin of safety.

Information Supporting an Environmental Assessment

An Environmental Assessment is not required for the Technical Specifications change proposed by this Change Request because the requested change 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 requested change will have no impact on the environment. The proposed TS change does not involve a Significant Hazards Consideration as discussed in the preceding safety assessment section. The proposed change does 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 change does 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 this proposed change to the Limerick Generating Station, Units 1 and 2, Technical Specifications, and have concluded that it does not involve an unreviewed safety question.

**SECTION 2: "RELOCATION OF PRIMARY CONTAINMENT CONDUCTOR PROTECTION
DEVICE REQUIREMENTS" (TSCR 94-36-0)**

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 relocate the requirements of TS 3/4.8.4.1 "Primary Containment Penetration Conductor Overcurrent Protective Devices." This proposed TS change is consistent with criteria delineated in the Improved Standard TS (i.e., NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," dated September 28, 1992). The proposed change to the TS are indicated by a vertical bar in the margin of TS pages xv, 3/4 8-21, and Bases page B 3/4 8-3 for Units 1 and 2. The TS pages, showing the proposed change is contained in Attachment 2.

We request that, if approved, the TS change proposed herein be issued by January 28, 1995, and become effective immediately upon issuance of the amendment.

This TS Change Request provides a discussion and description of the proposed TS change, a safety assessment of the proposed TS change, information supporting a finding of No Significant Hazards Consideration, and information supporting an Environmental Assessment.

Discussion and Description of the Proposed Change

This TS Change Request will relocate the requirements of TS Section 3/4.8.4.1 "Primary Containment Penetration Overcurrent Protective Device," to the Updated Final Safety Analysis Report (UFSAR) and plant procedures. The manner of performing surveillance requirements is currently described in plant procedures. The proposed change will allow future administrative control of changes of these requirements without processing a license amendment.

Safety Assessment

The change will relocate the TS requirements to the UFSAR and other PECO controlled documents. All future changes to the UFSAR and these controlled documents are subject to the change control process in the Administrative Controls Section of the LGS TS Section 6.0 including the provisions of 10 CFR 50.59. The proposed change is consistent with the BWR Improved Standard Technical Specifications (NUREG-1433).

The LGS "Primary Containment Penetration Conductor Overcurrent Protective Devices" TS Section protects penetrations and penetration conductors by either de-energizing circuits not required during reactor operation or demonstrating the OPERABILITY of primary and backup overcurrent protection circuit breakers through periodic surveillance. The overcurrent protective devices are not used for, nor capable of detecting a significant abnormal degradation of the reactor coolant pressure boundary. The devices are not process variables or do not monitor a process variable that is an initial condition of a DBA or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The devices are not part of the primary success path that functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The devices are non-significant risk contributors to core damage frequency and offsite release.

Information Supporting a Finding of No Significant Hazards Consideration

We have concluded that the proposed change to the Limerick Generating Station (LGS), Unit 1 and Unit 2, Technical Specifications (TS), which will relocate requirements from TS to other PECO controlled documents, does 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 TS change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

This proposed change relocates requirements from the TS to licensee controlled documents. The licensee controlled documents containing the relocated requirements will be maintained using the provisions of 10 CFR 50.59 and are subject to the change control process in the Administrative Controls Section 6.0 of the TS. Since changes to these licensee controlled documents will be evaluated per 10 CFR 50.59, no increase (significant or insignificant) in the probability or consequences of an accident previously evaluated will be allowed. Therefore, this change will not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

This change relocates requirements to licensee controlled documents. This change will not alter the plant configuration (no new or different type of equipment will be installed) or make changes in methods governing plant operation. This change will not impose different requirements and adequate control of information will be maintained. This change will not alter assumptions made in the safety analysis and licensing basis. Therefore, this change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed TS change does not involve a significant reduction in a margin of safety.

This change relocates requirements from the TS to licensee controlled documents. This change will not reduce a margin of safety since it has no impact on any safety analysis assumptions. In addition, the requirements to be transferred from the TS to the licensee controlled documents are the same as the existing TS. Since any future changes to these licensee controlled documents will be evaluated per the requirements of 10 CFR 50.59, no reduction (significant or insignificant) in margin of safety will be allowed. Therefore, this change will not involve a significant reduction in a margin of safety.

The existing requirements for NRC review and approval of revisions, in accordance with 10 CFR 50.59, to these details and requirements proposed for relocation, does not have a specific margin of safety upon which to evaluate. However, since the proposed change is consistent with the BWR Improved Standard TS (NUREG-1433 approved by the NRC Staff) and the change controls for proposed relocated details and requirements provide an equivalent level of regulatory authority, revising the TS to reflect the approved level of detail and requirements ensures no reduction to the margin of safety.

Information Supporting an Environmental Assessment

An Environmental Assessment is not required for the Technical Specifications change proposed by this Change Request because the requested change to the Limerick Generating Station, Units 1 and 2, TS conforms to the criteria for "actions eligible for categorical exclusion," as specified in 10CFR51.22(c)(9). The requested change will have no impact on the environment. The proposed TS change does not involve a Significant Hazards Consideration as discussed in the preceding safety assessment section. The proposed change does 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 change does 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 this proposed change to the Limerick Generating Station, Units 1 and 2, Technical Specifications, and have concluded that it does not involve an unreviewed safety question.

**SECTION 3: "FEEDWATER/MAIN TURBINE TRIP SYSTEM ACTUATION
INSTRUMENTATION REQUIREMENTS" (TSCR 94-40-0)**

PECO Energy Company, Licensee under Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station, Units 1 and 2 respectively, requests that the Technical Specifications (TS) contained in Appendix A to the Operating Licenses be amended as proposed herein, to permit the operability requirement for the Feedwater/Main Turbine Trip System Actuation Instrumentation to be Operational Condition (OPCON) 1 \geq 25% Rated Thermal Power (RTP).

This proposed TS change is consistent with criteria delineated in the Improved Standard TS (i.e., NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," dated September 28, 1992). The proposed changes to the TS are indicated by a vertical bar in the margin of TS pages 3/4 3-113 and 3/4 3-115 for Units 1 and 2. The TS pages showing the proposed change are contained in Attachment 2.

We request that, if approved, the TS change proposed herein be issued by January 28, 1995, and become effective immediately upon issuance of the amendment.

This TS Change Request provides a discussion and description of the proposed TS change, a safety assessment of the proposed TS change, information supporting a finding of No Significant Hazards Consideration, and information supporting an Environmental Assessment.

Discussion and Description of the Proposed Changes

The feedwater/main turbine trip system actuation instrumentation, reactor vessel water level-high level 8, is provided to initiate action of the feedwater/main turbine trip system in the event of failure of the feedwater controller under maximum demand. Operability requirements for this instrumentation require that it is operable in OPCON 1. The proposed T.S. change would permit the Level 8, Main/Reactor Feed Pump (RFP) Turbine trip logic operability verification testing up to 25% Rated Thermal Power (RTP). Additionally, equipment problems previously identified that render the Level 8 Main/RFP Turbine trip logic inoperable would no longer be an OPCON Change restraint. Plant Startup procedures would be revised to ensure the testing is completed during power ascension to 25% RTP. The change of operability requirements in Technical Specifications makes this section consistent with NUREG-1433 (Improved Standard Technical Specification for General Electric Plants, BWR/4) Revision 0.

Safety Assessment

The feedwater/main turbine trip system actuation instrumentation, Reactor Vessel Water Level - High Level 8, is provided to initiate action of the Main/RFP Turbine trip system in the event of failure of the feedwater controller under maximum demand. This system is designed for protection of the Main Turbine and RFP Turbines from damage due to water carry-over. The Main Turbine and RFP Turbines do not serve a safety function and are considered Balance of Plant Equipment. Also, the bases for Average Planar Linear Heat Generation Rate (APLHGR) and Minimum Critical Power Ratio (MCPR), and the Core Operating Limits Report were reviewed and show that a sufficient margin to core safety limits exist below 25% RTP, so fuel integrity limits are not violated. This change is consistent with NUREG-1433 (Improved Standard Technical Specification for General Electric Plants, BWR/4) Revision 0.

Information Supporting a Finding of No Significant Hazards Consideration

We have concluded that the proposed change to the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TS) that revise TS Requirement TS 3/4.3.9 to change the operability requirement for the feedwater/main turbine trip instrumentation, Reactor Vessel Water Level - High Level 8, from OPGON 1 to OPGON 1, \geq 25% RTP does not involve a Significant Hazards Consideration. In support of this determination, an evaluation of each of the three (3) standards set forth in 10CFR50.92 is provided below.

1. The proposed Technical Specifications (TS) change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

For the proposed TS change, in the event of a Reactor Vessel Water Level - High Level 8 transient, operator action per existing plant procedures would terminate the event and prevent damage to the Main/RFP Turbine due to water carry over. The Main/RFP Turbine do not serve a safety function, also at $<25\%$ RTP a Level 8 transient event will not cause a reactor scram. An analysis of information in the bases for APLHGR and MCPH has shown that a sufficient margin to core safety limits exist, so fuel integrity levels are not violated. Therefore, the proposed TS change does not involve an increase in the probability or consequences of an accident previously evaluated.

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

Should the feedwater/main turbine trip system, Reactor Vessel Water Level-High Level 8, not actuate in OPGON 1 at $<25\%$ RTP, operator action per existing plant startup procedures would protect the Main/RFP turbines. If operator action is not performed, damage to Balance of Plant, non-safety related equipment could occur. High Reactor Vessel Water Level is not a concern for reactor core safety at $<25\%$ RTP. Therefore, the proposed TS change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed TS change does not involve a significant reduction in a margin of safety.

The proposed TS change, which revises the feedwater/main turbine trip system actuation instrumentation, Reactor Vessel Water Level - High Level 8, operability requirements, does not affect the TS bases. The trips are designed to protect Balance of Plant Equipment at all Rated Power Levels. The Reactor Vessel Water Level - High Level 8 trips also protects fuel integrity at $>25\%$ RTP. Therefore, the proposed TS change to the operability requirements for the feedwater/main turbine trip system actuation instrumentation does not involve a reduction in a margin of safety.

Information Supporting an Environmental Assessment

An Environmental Assessment is not required for the Technical Specifications change proposed by this Change Request because the requested change 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 requested change will have no impact on the environment. The proposed TS change does not involve a Significant Hazards Consideration as discussed in the preceding safety assessment section. The proposed change does 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 change does 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 this proposed change to the Limerick Generating Station, Units 1 and 2, Technical Specifications, and have concluded that it does not involve an unreviewed safety question.

**SECTION 4: "PERMIT OPERABILITY OF LOW PRESSURE COOLANT INJECTION WHILE
ALIGNED TO SHUTDOWN COOLING" (TSCR 94-42-0)**

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 License be amended, as proposed herein, to permit the operability of one Low Pressure Coolant Injection (LPCI) subsystem of Residual Heat Removal (RHR) while the subsystem is aligned and operating in the Shutdown Cooling Mode during Operational Conditions (OPCONs) 4 and 5.

This proposed TS change is consistent with criteria delineated in the Improved Standard TS (i.e., NUREG-1433, "Standard Technical Specifications, Central Electric Plants, BWR/4," dated September 28, 1992). The proposed change to TS is indicated by a vertical bar in the margin of TS pages 3/4 5-6 and 3/4 5-7 for Units 1 and 2. The TS pages showing the proposed changes are contained in Attachment 2.

We request that, if approved, the TS change proposed herein be issued by January 28, 1995, and become effective immediately upon issuance of the amendment.

This TS Change Request provides a discussion and description of the proposed TS change, a safety assessment of the proposed TS change, information supporting a finding of No Significant Hazards Consideration, and information supporting an Environmental Assessment.

Discussion and Description of the Proposed Changes

This TS Change Request would add a note stating, "One LPCI subsystem may be considered OPERABLE during alignment and operation for decay heat removal if capable of being manually realigned and not otherwise inoperable." This change is consistent with NUREG - 1433 "Standard Technical Specifications."

LGS TS Surveillance Requirement 3.5.2.b. and Surveillance Requirement 4.5.2.1 will be changed to add the note describing the LPCI operability.

Safety Assessment

This proposed change is administrative in nature, in that there will be no physical changes made to plant equipment nor the method of their operation that would result in an unanalyzed condition. The change will increase the time required to obtain rated LPCI conditions due to the manual alignment of the subsystem; however, the reactor operator has sufficient time during OPCONs 4 and 5 to perform the manual LPCI alignment, from the Main Control Room, since the reactor decay heat loads and temperatures are significantly reduced from those parameters analyzed for OPCON 1. An integrated system response time is an ECCS operability requirement, which is currently 40 seconds for LPCI. This is based on OPCON 1 Design Basis Accident (DBA) Loss of Coolant Accident (LOCA) requirements. Additionally, the LGS Updated Final Safety Analysis Report (UFSAR) Section 6.3 states based on the conditions of OPCON 1, two loops of Core Spray and one loop of LPCI are the minimum required low pressure ECCS. When the unit is in OPCON 4 or 5, cold shutdown has already been obtained, eliminating the high temperatures of OPCON 1. The cooler reactor inventory eliminates the loss of coolant potential from depressurization and the inventory flashing to steam. Therefore, while in OPCONs 4 and 5, the remaining methods of inventory loss are boil off and draindown, which are also reduced. Sound engineering judgment indicates there is sufficient time to perform the manual realignment.

In addition to the OPCI 1 LOCA analysis, shutdown cooling operations have been an initiator of many industry events where primary coolant inventory was lost. The consequences of this accident are decreased since the loop of RHR must be realigned for LPCI to mitigate the event, and the realignment, in itself, will terminate the drain down event. The proposed change is consistent with the BWR Standard Technical Specifications (NUREG-1433).

Information Supporting a Finding of No Significant Hazards Consideration

We have concluded that the proposed change to the Limerick Generating Station (LGS), Unit 1 and Unit 2, Technical Specifications (TS), which will permit the operability of one Low Pressure Coolant Injection (LPCI) subsystem of Residual Heat Removal (RHR), while aligned to decay heat removal during OPCI 4 and 5, does 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 change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The LPCI mode of RHR is an accident mitigator, not an initiator. Currently, the LPCI mode of RHR is an automatic Emergency Core Cooling System (ECCS) function during OPCI 4 and 5. However, shutdown cooling has been an accident initiator in many industry events. Reliance on this loop of RHR for LPCI does not increase the probability of an accident in shutdown cooling, but the alignment for LPCI will, in itself, terminate the draindown event by exiting the shutdown cooling mode. This proposed change will permit the operability of one LPCI subsystem while the components of that subsystem are aligned and operating in the Shutdown Cooling mode of RHR, provided all other components of that subsystem are operable and can be manually realigned from the Main Control Room, if required. The required number of operable Emergency Core Cooling Systems (ECCS) remains unchanged, thus maintaining the TS required subsystem redundancy (TS Section 3.5.2 requires two operable ECCS subsystems with exception for Reactor level). With this change, the required number of LPCI subsystems are capable of performing their function of limiting and or mitigating the consequences of an accident, by allowing the manual alignment of one LPCI subsystem, during OPCI 4 and 5. This allowance is justified since the change only applies to OPCI 4 and 5, when reactor temperature, and associated heat loads are sufficiently low to provide the operator sufficient time to perform the manual realignment, from the Main Control Room, of the RHR pump suction valves and restart of the pump following LPCI injection conditions. Similar allowances for LPCI are currently permitted during OPCI 3, since the decay heat loads are significantly reduced compared to OPCI 1, which is the mode of operation under which ECCS capability is analyzed (Section 6.3 of the LGS Updated Final Safety Analysis Report (UFSAR)). The change will not increase the probability of occurrence or consequences of a malfunction of equipment since there will be no physical changes made to plant equipment nor the method of their operation that would result in an unanalyzed condition. PECO Energy evaluated the need for manual realignment of the pump minimum flow path since operating in Shutdown Cooling typically results in the isolation of the pump minimum flow path to prevent inadvertent draining of the reactor vessel. The associated pump is still operable since this change is limited to OPCI 4 and 5, when reactor pressure is sufficiently low to allow immediate injection to the reactor vessel without a minimum flow path. In situations, while in OPCI 4, where reactor pressure may not be sufficiently low to allow injection, the RHR system will not be aligned for Shutdown Cooling, since the reactor vessel pressure will be greater than the RHR "cut-in" permissive pressure. In addition, Administrative Controls are currently in place to realign RHR to the LPCI mode for planned pressure increases. Finally, this change is consistent with NUREG - 1433

"Standard Technical Specifications." Therefore, these changes will not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

The LPCI mode of RHR is an accident mitigator, not an initiator. This change will not reduce the number of required ECCS during OPCIIONS 4 and 5. This change will permit the operability of one LPCI subsystem while the components of that subsystem are aligned and operating in the Shutdown Cooling mode of RHR. The change does not alter current methods of plant operation nor does the change make a physical change to plant equipment resulting in an unanalyzed malfunction of equipment. Therefore, this change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed TS change does not involve a significant reduction in a margin of safety.

The basis of TS Section 3.5.2 is to ensure sufficient ECCS capacity to maintain core cooling in OPCIIONS 4 and 5. This proposed change does not affect the required number of ECCS during OPCIIONS 4 and 5; therefore, adequate capability through subsystem redundancy is maintained. The amount of time required to obtain rated LPCI conditions is increased due to the manual realignment, from the Main Control Room, of the suction valves and restart of the RHR pump following LPCI injection conditions. This change is in conformance with the current TS bases, since the operator has sufficient time to perform the manual realignment, during OPCIIONS 4 and 5, ensuring sufficient ECCS capability to maintain core coverage. In addition, NUREG - 1433 BASES states, in part, "One LPCI subsystem may be aligned for decay heat removal and considered OPERABLE for the ECCS function, if it can be manually realigned (remote or local) to the LPCI mode and is not otherwise inoperable. Because of low pressure and low temperature conditions in MODES 4 and 5, sufficient time will be available to manually align and initiate LPCI subsystem operation to provide core cooling prior to postulated fuel uncover." Therefore this change will not involve a significant reduction in a margin of safety.

Information Supporting an Environmental Assessment

An Environmental Assessment is not required for the TS change proposed by this Change Request because the requested change 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 requested change will have no impact on the environment. The proposed TS change does not involve a Significant Hazards Consideration as discussed in the preceding safety assessment section. The proposed change does 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 change does 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 this proposed change to the Limerick Generating Station, Units 1 and 2, TS, and have concluded that it does not involve an unreviewed safety question.

**SECTION 5: "REMOVE TEMPERATURE REQUIREMENT FOR OPERATIONAL
CONDITION 5" (TSCR 94-44-0)**

PECO Energy Company, Licensee under Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station, Units 1 and 2, respectively, requests that the Technical Specifications (TS) contained in Appendix A to the Operating Licenses be amended as proposed herein, to revise TS Table 1.2 and TS Bases 3/4.9.11 to remove the average reactor coolant temperature requirement in Operational Condition (OPCON) 5, Refueling. This proposed TS change is consistent with criteria delineated in the Improved Standard TS (i.e., NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," dated September 28, 1992). The proposed change to the TS is indicated by a vertical bar in the margin of TS page 1-10 and TS Bases page B 3/4 9-2 for Units 1 and 2. The TS pages and TS Bases pages showing the proposed change are contained in Attachment 2.

We request that, if approved, the TS change proposed herein be issued by January 28, 1995, and become effective immediately upon issuance of the amendment.

This TS Change Request provides a discussion and description of the proposed TS change, a safety assessment of the proposed TS change, information supporting a finding of No Significant Hazards Consideration, and Information Supporting an Environmental Assessment.

Discussion and Description of the Proposed Change

The proposed Technical Specifications (TS) Change Request involves the change of Limerick Generating Station, Units 1 and 2, TS Table 1.2 and TS Bases 3/4.9.11 to remove the average reactor coolant temperature requirement in Operational Condition (OPCON) 5, Refueling.

The average reactor coolant temperature requirement in OPCON 5 is proposed to change from $\leq 140^{\circ}\text{F}$ to 'N/A' in the definition of OPCON 5 shown in TS Table 1.2. This change is consistent with the requirements of the Improved Standard Technical Specifications, NUREG-1433, issued September 28, 1992. This change to the TS Table 1.2, "Operational Conditions", eliminates the confusion as to which OPCON is applicable if the reactor coolant temperature exceeds 140°F with the reactor pressure vessel head removed. Currently, a temperature of greater than 140°F implies that the Unit is no longer in OPCON 5, however, the Unit is clearly not in OPCON 4, Cold Shutdown. In conjunction with this change, TS Bases 3/4.9.11 "Residual Heat Removal and Coolant Circulation," will be revised to eliminate the reference to the OPCON 5 temperature requirement of 140°F . LGS will maintain the reactor coolant temperature below 140°F in accordance with station procedures. Therefore, the potential to remove decay heat will be maintained and the 140°F temperature will remain in the bases for TS 3/4.9.11. A change to the 140°F temperature in the future would still require Plant Operations Review Committee (PORC) approval of a Safety Evaluation and would only be performed on a case by case basis.

The elimination of the temperature requirement in OPCON 5 was reviewed for potential effect on reactor coolant system materials. This proposed TS change does not result in system temperature and pressure changes not previously analyzed. There is no effect on the material fracture toughness analysis or reduction in the protection against non-ductile failure. The reactor coolant system temperature and pressure are still restricted per TS Section 3/4.4.6.

The potential increased temperature effects were also evaluated for adequate shutdown margin, and it was determined that the potential increase in temperature between 140°F and 200°F to stay below OPCON 4, would have a negligible, however conservative effect on shutdown margin.

Based on the above discussion it is concluded that a temperature requirement of 140°F for OPCON 5, Refueling, is not required provided that all required TS actions and procedural controls are followed. Therefore, we propose that TS Table 1.2 and TS Bases 3/4.9.11 be changed to reflect the removal of temperature requirement in OPCON 5, Refueling. This proposed change is consistent with the requirements in the Improved Standard Technical Specifications, NUREG-1433, issued September 28, 1993.

Safety Assessment

The proposed TS change is in accordance with the requirements of the Improved Standard Technical Specifications, NUREG-1433, issued September 28, 1992, and does not involve a physical change in the configuration or operation of any systems important to safety. The elimination of a temperature requirement from the definition of Operational Condition (OPCON) 5, Refueling, does not result in reactor coolant system temperature and pressure changes, or reactivity changes not previously analyzed. The reactor pressure vessel will still be restricted to the temperature and pressure limits of TS Section 3/4.4.6 which includes heatup/cooldown rates and minimum boltup limits.

The actual coolant temperature of 140°F will be administratively controlled by station procedures, to maintain the capability to remove decay heat. The potential increase in temperature between 140°F and 200°F to stay below OPCON 4, Cold Shutdown, would have a negligible, however conservative effect on shutdown margin which will improve due to the change in moderator density.

The proposed TS change does not affect existing accident analyses or design assumptions, nor does it impact any safety limits of the plant.

Information Supporting a Finding of No Significant Hazards Consideration

We have concluded that the proposed change to the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TS) which will remove the average reactor coolant temperature requirement in Operational Condition (OPCON 5) Refueling, does 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 (TS) change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed TS change does not involve a physical change in the configuration of any systems important to safety. The elimination of a temperature requirement from the definition of OPCON 5 was reviewed for potential effect on reactor coolant system materials and for potential effect on reactivity. This TS change does not result in system temperature and pressure change or reactivity changes not previously analyzed. The reactor pressure vessel will still be restricted to the temperature and pressure limits of TS Section 3/4.4.6 which includes heatup/cooldown rates and minimum boltup limits. The reactor pressure vessel temperature and pressure limits will still ensure proper protection of the reactor coolant system materials. Therefore, this TS change does not increase the probability or consequences of an accident previously evaluated.

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

The proposed TS change does not involve any physical changes in plant configuration, and reactor coolant system temperature and pressure are still restricted per TS Section 3/4.4.6. The decrease in moderator density corresponding to the potential change in temperature (i.e., above 140°F and below 200°F) would have a negligible, however conservative effect on shutdown margin. Therefore this TS change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed TS change does not involve a significant reduction in a margin of safety.

This proposed TS change does not change the reactor coolant system material restrictions as defined in TS Section 3/4.4.6. Therefore, the reactor pressure vessel will still be maintained under the current temperature and pressure restrictions as well as the current boltup limits.

The decrease in moderator density corresponding to the potential temperature change from 140°F to 200°F is insignificant and would afford approximately the same moderator effect. Therefore, shutdown margin could only be improved (although marginally) at these evaluated temperatures. The actual coolant temperature will be administratively controlled to provide for personnel safety. Therefore, this change will not involve a reduction in a margin of safety.

Information Supporting an Environmental Assessment

An Environmental Assessment is not required for the change proposed by this TS Change Request because the requested change to the LGS, Units 1 and 2, TS conform to the criteria for "actions eligible for categorical exclusion," as specified in 10 CFR 51.22(c)(9). The requested change will have no impact on the environment. The proposed change does not involve a Significant Hazards Consideration as discussed in the preceding section. The proposed change does not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite. In addition, the proposed change does 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 this proposed change to the LGS, Units 1 and 2, TS and have concluded that it does not involve an unreviewed safety question, and will not endanger the health and safety of the public.

**SECTION 6: "REDUCE FREQUENCY OF ALTERNATE DECAY HEAT DEMONSTRATION"
(TSCR 94-45-0)**

PECO Energy Company, Licensee under Facility Operating License Nos. NPF 39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively, requests that the Technical Specifications (TS) contained in Appendix A to the Operating Licenses be amended as proposed herein to modify TS Sections 3.4.9.1, 3.4.9.2, 3.9.11.1, 3.9.11.2, and the associated Bases Sections 3/4.4.9 and 3/4.4.11, to permit the use of either an "analytical approach" (i.e., calculation) or "demonstration" to ensure the operability of an alternate decay heat removal method, rather than the existing TS requirement which stipulates that operability of the alternate decay removal method be demonstrated. The proposed changes to the TS are indicated by a vertical bar in the margin of affected TS pages. The TS pages showing the proposed changes are contained in Attachment 2.

We request that, if approved, the TS change proposed herein be issued by January 28, 1995, and become effective immediately upon issuance of the amendments.

This TS Change Request provides a discussion and description of the proposed TS changes, a safety assessment of the proposed TS change, information supporting a finding of No Significant Hazards Consideration, and information supporting an Environmental Assessment.

Discussion and Description of the Proposed Change

Currently, the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TS) Sections 3.4.9.1, 3.4.9.2, 3.9.11.1, and 3.9.11.2 require that operability of at least one (1) alternate decay heat removal method be "demonstrated" if the specified number of Residual Heat Removal (RHR) Shutdown Cooling mode loops are not OPERABLE. This proposed TS change involves revising TS Sections 3.4.9.1, 3.4.9.2, 3.9.11.1, 3.9.11.2, and the associated Bases Sections 3/4.4.9 and 3/4.4.11, to allow for the use of either an "analytical approach" (i.e., calculation) or "demonstration" as the means for ensuring operability of at least one (1) alternate decay heat removal method, rather than just "demonstration" which is currently the case. Specifically, this proposed TS change involves revising ACTION "a" in TS Sections 3.4.9.1, 3.4.9.2, 3.9.11.1, and 3.9.11.2 by modifying the phrase, "...demonstrate the operability of at least one alternate method...", to read, "...verify the availability of at least one alternate method...", as it relates to the operability of an alternate decay heat removal method. This TS change also involves revising the associated Bases Sections 3/4.4.9 and 3/4.4.11 to clarify the intent of statement, "...verify the availability...", to imply that the operability of an alternate decay heat removal method can be determined using either an "analytical method" (i.e., calculation) or by "demonstration." In addition, this proposed TS change is consistent with criteria delineated in the Improved Standard TS (i.e., NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," dated September 28, 1992).

Safety Assessment

Shutdown Cooling is a mode of operation of the Residual Heat Removal (RHR) system, and is designed to remove decay and sensible heat loads from the primary coolant system following a reactor shutdown. The Shutdown Cooling mode of operation of the RHR system has the capability to remove these heat loads in order to facilitate refueling or maintenance activities, or for maintaining the reactor in a HOT SHUTDOWN condition. There are two (2) separate Shutdown Cooling loops, which are manually controlled by Operations personnel from the Main Control Room (MCR). Each loop consists of two (2) RHR pumps, and one (1) RHR heat exchanger which is cooled by the Residual Heat Removal Service Water (RHRSW) system. Although both loops are usually employed to support reactor shutdown operations, the reactor primary coolant temperature can be lowered to 212°F in less than 20 hours with only one (1)

loop in operation.

This proposed TS Change Request involves revising the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TS) to modify Sections 3.4.9.1, 3.4.9.2, 3.9.11.1, 3.9.11.2, and the associated Bases Section 3/4.4.9 and 3/4.9.11, to permit the use of either an "analytical approach" (i.e., calculation) or "demonstration" as the means for ensuring operability of at least one (1) alternate decay heat removal method, rather than "demonstrating" the operability, which is currently required. These TS sections pertain to Shutdown Cooling operation requirements during HOT SHUTDOWN, COLD SHUTDOWN, and Refueling Operations at the plant. Specifically, this proposed TS will revise ACTION "a" in TS Sections 3.4.9.1, 3.4.9.2, 3.9.11.1, and 3.9.11.2 by modifying the phrase, "...demonstrate the operability of at least one alternate method...", to read, "...verify the availability of at least one alternate method...", as it relates to operability of an alternate decay heat removal method. The associated Bases Sections 3/4.4.9 and 3/4.9.11 will also be revised to clarify the intent of statement, "...verify the availability...", to imply that the operability of an alternate decay heat removal method can be determined either by "calculation" (which includes a review of component and system availability to verify that an alternate decay heat removal method is available) or by "demonstration."

This proposed TS change is consistent with criteria delineated in the Improved Standard TS (i.e., NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," dated September 28, 1992). This proposed TS change will allow either "calculation" or "demonstration" to determine the operability of an alternate decay heat removal method. This proposed TS change will not affect the capability, availability, or operation of any decay heat removal systems/methods. The operation of the Residual Heat Removal (RHR) and Residual Heat Removal Service Water (RHRSW) systems will not be impacted by this proposed TS change.

Information Supporting a Finding of No Significant Hazards Consideration

We have concluded that the proposed change to the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TS) that revise TS Sections 3.4.9.1, 3.4.9.2, 3.9.11.1, 3.9.11.2, and the associated Bases Sections 3/4.4.9 and 3/4.9.11, to permit the use of either an "analytical approach" (i.e., calculation) or "demonstration" as the means for ensuring operability of at least one (1) alternate decay heat removal method, does 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 (TS) change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed TS change does not involve any physical changes to plant systems or equipment. This proposed TS change will allow the use of either an "analytical approach" (i.e., calculation) or "demonstration" to ensure the operability of an alternate decay heat removal method. This proposed TS change does not involve any physical changes to plant systems or components, nor does it affect the capability, availability, or operability of any decay heat removal systems/methods (e.g., Shutdown Cooling). The Shutdown Cooling mode of operation of the Residual Heat Removal (RHR) system, and Residual Heat Removal Service Water (RHRSW) system, are not impacted by this proposed TS change, and will continue to function as designed to remove decay heat loads from the reactor primary coolant system. The RHRSW system and various modes of operation of the RHR system, e.g., Low Pressure Coolant Injection (LPCI) are not accident initiators, since these systems function to mitigate the consequences of an accident. This proposed TS change is

consistent with the criteria delineated in the Improved Standard TS (i.e., NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," dated September 28, 1992).

Therefore, the proposed TS change does not involve an increase in the probability or consequences of an accident previously evaluated.

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

This proposed TS change does not involve any physical changes to plant systems or equipment. The proposed TS change will allow the use of a "calculation" or "demonstration" as the means for determining the operability of an alternate decay heat removal method. The proposed TS change does not involve any physical changes to plant systems or equipment. This proposed TS change will not affect the operation of the Shutdown Cooling mode of the RHR system. This mode of operation will continue to function as designed to remove decay heat loads from the reactor primary coolant system. This proposed TS change will not impact the operation of the other modes of operation of the RHR system (e.g., LPCI), nor will it affect the operation of the RHRSW system. These systems will continue to function as designed, which is to mitigate the consequences of an accident. This proposed TS change will not introduce the potential for equipment malfunctions or failures. This proposed TS change is consistent with the criteria delineated in the Improved Standard TS (i.e., NUREG-1433).

Therefore, the proposed TS change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. The proposed TS change does not involve a significant reduction in a margin of safety.

The proposed change to the TS does not involve any physical changes to plant systems or equipment. This proposed TS change does not make any physical modifications to plant systems or equipment, and is consistent with the criteria delineated in the Improved Standard TS (i.e., NUREG-1433). The proposed TS change will not impact any mode of operation of the RHR system or the RHRSW system.

This proposed TS change involves revising TS ACTION statements, and associated supporting Bases sections, to allow for the use of a "calculation" or "demonstration" to ensure the operability of an alternate decay heat removal method. The bases for the TS sections affected by this proposed change indicate that sufficient heat removal capability, system redundancy, and coolant circulation will be available to facilitate decay heat removal and mixing to assure accurate temperature indication. This proposed TS change does not affect the function or availability of any decay heat removal system or method.

Therefore, the proposed TS change does not involve a reduction in a margin of safety.

Information Supporting an Environmental Assessment

An Environmental Assessment is not required for the change proposed by this Change Request because the requested change to the LGS, Units 1 and 2, TS conforms to the criteria for "actions eligible for categorical exclusion," as specified in 10 CFR 51.22(c)(9). The requested change will have no impact on the environment. The proposed change does not involve a significant hazards consideration as discussed in the preceding section. The proposed change does 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 change does 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 the proposed change to the LGS, Units 1 and 2, TS and have concluded that it does not involve an unreviewed safety question, and will not endanger the health and safety of the public.