

June 5, 2003

Mr. Bryce L. Shriver
Senior Vice President
and Chief Nuclear Officer
PPL Susquehanna, LLC
769 Salem Boulevard, NUCSB3
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SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 - ISSUANCE
OF AMENDMENT RE: INTERMITTENT OPENING OF ISOLATED FLOW
PATHS AND TIP ISOLATION (TAC NOS. MB6665 AND MB6666)

Dear Mr. Shriver:

The Commission has issued the enclosed Amendment No. 213 to Facility Operating License No. NPF-14 and Amendment No. 188 to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station (SSES), Units 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated October 31, 2002.

These amendments revise Technical Specifications (TSs) Section 3.3.6.1, "Primary Containment Isolation Instrumentation," to add an ACTIONS Note allowing intermittent opening, under administrative control, of penetration flow paths that are isolated. Additionally, these amendments revise TSs to breakout the traversing incore probe system isolation as a separate isolation Function with an associated Required Action to isolate the penetration within 24 hours rather than immediately initiating a unit shutdown. As stated in your application, changes to the Bases for TS 3.3.6.1 will be addressed in accordance with TS 5.5.10, "TS Bases Control Program."

A copy of our safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's Biweekly *Federal Register* Notice.

Sincerely,

/RA/

Richard V. Guzman, Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-387 and 50-388

Enclosures: 1. Amendment No. 213 to
License No. NPF-14
2. Amendment No. 188 to
License No. NPF-22
3. Safety Evaluation

cc w/encls: See next page

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OFFICE	PDI-1/PM	PDI-2/LA	RORP	OGC	PDI-1/SC
NAME	RGuzman	MO'Brien	RDennig*	RHoeffling	RLaufer
DATE	5/23/03	5/27/03	02/21/03	6/3/03	6/4/03

OFFICIAL RECORD COPY

Susquehanna Steam Electric Station,
Units 1 & 2

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Units 1 & 2

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PPL SUSQUEHANNA, LLC
ALLEGHENY ELECTRIC COOPERATIVE, INC.
DOCKET NO. 50-387
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 213
License No. NPF-14

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
 - A. The application for the amendment filed by PPL Susquehanna, LLC, dated October 31, 2002, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of the Facility Operating License No. NPF-14 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 213 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. PPL Susquehanna, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Richard J. Laufer, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: June 5, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 213

FACILITY OPERATING LICENSE NO. NPF-14

DOCKET NO. 50-387

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

3.3-52

3.3-62

INSERT

3.3-52

3.3-62

PPL SUSQUEHANNA, LLC

ALLEGHENY ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-388

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 188

License No. NPF-22

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
 - A. The application for the amendment filed by the PPL Susquehanna, LLC, dated October 31, 2002, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of the Facility Operating License No. NPF-22 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 188 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. PPL Susquehanna, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Richard J. Laufer, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: June 5, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 188

FACILITY OPERATING LICENSE NO. NPF-22

DOCKET NO. 50-388

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

3.3-52

3.3-62

INSERT

3.3-52

3.3-62

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 213 TO FACILITY OPERATING LICENSE NO. NPF-14
AND AMENDMENT NO. 188 TO FACILITY OPERATING LICENSE NO. NPF-22
PPL SUSQUEHANNA, LLC
ALLEGHENY ELECTRIC COOPERATIVE, INC.
SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2
DOCKET NOS. 50-387 AND 388

1.0 INTRODUCTION

By application dated October 31, 2002, PPL Susquehanna, LLC (PPL, the licensee), requested changes to the Technical Specifications (TSs) for Susquehanna Steam Electric Station, Units 1 and 2 (SSES 1 and 2).

The proposed amendments would revise TSs Section 3.3.6.1, "Primary Containment Isolation Instrumentation," to add an ACTIONS note allowing intermittent opening, under administrative control, of penetration flow paths that are isolated, and to breakout the traversing incore probe (TIP) system isolation as a separate isolation Function with an associated Required Action to isolate the penetration within 24 hours rather than immediately initiating a unit shutdown.

2.0 REGULATORY EVALUATION

The U.S. Nuclear Regulatory Commission (NRC) staff finds that PPL in its October 31, 2002, submittal identified the applicable regulatory requirements. The regulatory requirements and guidance which the NRC staff considered in its review of the application are as follows:

1. The criteria for inclusion of limiting conditions for operation (LCOs) in the TSs are given in Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.36(c)(2)(ii).
2. Precedent as contained in generic change, TSTF-306, Revision 2, to NUREG-1433, Revision 1, "Standard Technical Specifications [STS] for General Electric Plants (BWR/4)," dated April 1995.

The primary containment isolation instrumentation automatically initiates closure of appropriate primary containment isolation valves (PCIVs). The function of the PCIVs, in combination with other accident mitigation systems, is to limit fission product release during and following postulated design-basis accidents (DBAs). Primary containment isolation within the time limits specified for those isolation valves designed to close automatically ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analysis for a DBA.

The TIP System isolation ball valves, which are only open when the TIP system is in use, receive isolation signals from the Primary Containment Isolation Function, as specified in Table 3.3.6.1-1, Function 2.a (Reactor Vessel Water Level - Low Level 3) and 2.d (Drywell Pressure - High). As such, an inoperability of the Primary Containment Isolation Function affecting only the TIP instrumentation would require a unit shutdown. Isolation of the TIP System penetration flow paths in a design-basis event is assumed to be accomplished by manually actuating the shear (squib) valves. It should be noted, however, that the Unit 1 TIP System is powered from an auxiliary instrument bus which has an uninterruptible power supply and hence, the TIP drive mechanisms and ball valve controls for Unit 1 will still function in the event of a loss of offsite power.

3.0 TECHNICAL EVALUATION

3.1 Proposed TS Changes

PPL proposes the following changes to SSES 1 and 2 TS 3.3.6.1:

1. Adds a Note 1 to the Action Notes that states "Penetration flow paths may be unisolated intermittently under administrative controls." The existing note on separate condition entry now becomes Note 2.
2. Revises the Completion Time of Condition A from "12 hours for Functions 2.a, 2.d, and 6.b AND 24 hours for Functions other than Functions 2.a, 2.d, and 6.b" to "12 hours for Functions 2.a, 2.d, 6.b, 7.a, and 7.b AND 24 hours for Functions other than Functions 2.a, 2.d, 6.b, 7.a and 7.b."
3. Adds Function 7, "Traversing Incore Probe Isolation" along with its appropriate Applicable MODES, Required Channels, Conditions, SRs, and Allowable Values to Table 3.3.6.1-1, "Primary Containment Isolation Instrumentation."
4. Revises the Bases for TS 3.3.6.1 to address the above changes.

3.2 Evaluation of Change

TS 3.3.6.1 currently requires a unit shutdown in the event of an inoperability of the TIP instrumentation. PPL is proposing to allow 24 hours to isolate the affected TIP penetration flow paths. In addition, the proposal would allow intermittent opening, under administrative control, of penetration flow paths that are isolated. The changes are consistent with TSTF-306. The proposed amendments would also modify the TS Bases to describe the proposed changes and provide supporting information. In its submittal, PPL indicated that adopting the provisions of TSTF-306 provides a significant benefit to the operation of SSES 1 and 2, in that it serves to provide consistency between the requirements for equipment and the instrumentation that supports the equipment, and additional flexibility in the performance of maintenance and repair activities.

Prior to the Approval of TSTF-306, STS 3.3.6.1 would not allow intermittent opening, under administrative controls, of penetration flow paths isolated due to inoperable primary containment isolation instrumentation and would require a shutdown in the event of an

inoperability of the TIP instrumentation. TSTF-306 revised STS 3.3.6.1 and its associated Bases to be consistent with requirements of STS 3.6.1.3, "Primary Containment Isolation Valves," with respect to administratively opening isolated penetration flow paths and to be consistent with the Actions in STS 3.3.6.1 for inoperable manual isolation functions.

The Actions for the SSES 1 and 2 TS 3.3.6.1 would be modified by the addition of a Note allowing intermittent opening, under administrative control, of penetrations that are isolated to comply with Actions, surveillance requirements (SRs), or operating conditions. These controls consist of stationing a dedicated operator at the controls of the valve, who is in continuous communication with the control room. The primary containment isolation instrumentation serves as a support system for the primary containment isolation valves. Current SSES 1 and 2 TS 3.6.1.3, "Primary Containment Isolation Valves," contains an Action Note which allows penetrations isolated due to Actions, SRs, and operating conditions to be intermittently opened under administrative control. The accident consequences are not affected by the allowance of isolated penetrations to be intermittently opened under administrative control due to an inoperable PCIV of its associated instrumentation. Since the Actions for inoperability of the instrumentation need not be more restrictive than the inoperability of the function it supports, the addition of Action Note 1 is acceptable.

The SSES 1 and 2 TS 3.3.6.1 would be further modified to breakout the TIP System isolation as a separate isolation instrumentation Function with an associated Required Action to isolate the penetration within 24 hours rather than having to immediately initiate a unit shutdown. TIP System isolation in a design-basis event (with a loss of offsite power) would be accomplished by manual actuation of the shear valves. Additionally, the Actions for inoperable primary containment isolation instrumentation that requires a unit shutdown is overly restrictive in the event that the inoperability affects only the TIP isolation instrumentation. The proposed Action for the inoperability of this Function is the same as for inoperable manual isolation Functions (i.e., isolate the penetration in 24 hours). This is because the TIP system penetration is a small bore (approximately ½ inch), and its isolation in a design-basis event is via the manually operated shear valves. The ability to manually isolate the TIP System by either the normal isolation valve or the shear valve isolation Functions provides an appropriate level of safety. Therefore, the NRC staff finds the proposed changes acceptable and consistent with the STS and TSTF-306.

3.3 Summary

The NRC staff has reviewed the request by PPL to revise the TSs for SSES 1 and 2. The proposed change is consistent with the STS and TSTF-306 and provides reasonable assurance of overall plant safety. Based on the review, the NRC staff concludes that the proposed changes are acceptable. Although the licensee's application included wording for the revised Bases discussion for TS 3.3.6.1, the licensee will formally address the change to the Bases in accordance with the TS Bases Control Program described in TS 5.5.10.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (67 FR 78523). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: R. Giardina
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Date: June 5, 2003