

August 16, 2005

Mr. Bryce L. Shriver  
President-PPL Generation  
and Chief Nuclear Officer  
PPL Susquehanna, LLC  
Two North Ninth Street, GENTW15  
Allentown, PA 18101-1179

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 - ISSUANCE  
OF AMENDMENTS RE: SECONDARY CONTAINMENT ACCESS DOORS  
SURVEILLANCE REQUIREMENT 3.6.4.1.3 (TAC NOS. MC2378 AND MC2379)

Dear Mr. Shriver:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 224 to Facility Operating License No. NPF-14 and Amendment No. 201 to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station, Units 1 and 2 (SSES 1 and 2). These amendments are in response to your application dated March 5, 2004.

The amendments revise the SSES 1 and 2 Technical Specification Surveillance Requirement (SR) 3.6.4.1.3 to require that only one secondary containment access in each opening be verified closed. In addition, the SR will include a note allowing entry and exit access between required zones within the secondary containment boundary where there is only a single door provided.

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. 224 to  
License No. NPF-14  
2. Amendment No. 201 to  
License No. NPF-22  
3. Safety Evaluation

cc w/encls: See next page

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- 2. Amendment No. 201 to License No. NPF-22
- 3. Safety Evaluation

DISTRIBUTION:  
 PDI-1 R/F GMatakas, RGN-1  
 ACRS RGuzman OGC  
 PUBLIC M'OBrien GHill (4)  
 DLPM DPR RLaufer TBoyce

cc w/encls: See next page

Accession No.: ML050830280

Package No.:

TSs:

OFFICE	PDI-1/PM	PDI-2/LA	IROB-A/SC	OGC	PDI-1/SC
NAME	RGuzman	MO'Brien	TBoyce	MDuffy	JBoska for RLaufer
DATE	3/22/05	3/24/05	8/04/05	4/8/05	8/11/05

OFFICIAL RECORD COPY

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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. 224  
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 March 5, 2004, 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. 224 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 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/ by JBoska for*

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: August 16, 2005

ATTACHMENT TO LICENSE AMENDMENT NO. 224

FACILITY OPERATING LICENSE NO. NPF-14

DOCKET NO. 50-387

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

REMOVE  
3.6-36

INSERT  
TS / 3.6-36

PPL SUSQUEHANNA, LLC

ALLEGHENY ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-388

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 201  
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 PPL Susquehanna, LLC, dated March 5, 2004, 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. 201 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 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/ by JBoska for*

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: August 16, 2005

ATTACHMENT TO LICENSE AMENDMENT NO. 201

FACILITY OPERATING LICENSE NO. NPF-22

DOCKET NO. 50-388

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

REMOVE  
3.6-36

INSERT  
TS / 3.6-36

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 224 TO FACILITY OPERATING LICENSE NO. NPF-14  
AND AMENDMENT NO. 201 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 March 5, 2004 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML040760767), 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 changes would revise the SSES 1 and 2 TS Surveillance Requirement (SR) 3.6.4.1.3 to require that only one secondary containment access door in each access opening be verified closed. In addition, the SR 3.6.4.1.3 would include a note allowing entry and exit access between required zones within the secondary containment boundary where there is only a single door provided.

## 2.0 REGULATORY EVALUATION

The Nuclear Regulatory Commission (NRC) finds that PPL, in its March 5, 2004, 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. Title 10 of the *Code of Federal Regulations* (10 CFR) establishes the fundamental regulatory requirements with respect to the reactivity control systems. Specifically, GDC 16, "Containment design," in Appendix A to Part 50, "General Design Criteria for Nuclear Power Plants," states that reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require.
2. GDC 50, "Containment design basis," states, in part, that the reactor containment structure, including access openings, penetrations, and the containment heat removal system shall be designed so that the containment structure and its internal

compartments can accommodate, without exceeding the design leakage rate and with sufficient margin, the calculated pressure and temperature conditions resulting from any loss-of-coolant accident.

3. Section 50.36, "Technical specifications," provides the regulatory requirements for the content required in a licensee's TSs. Section 50.36 states, in part, that the TSs will include SRs to assure that the quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation (LCO) will be met.
4. The basis for the secondary containment design requirements is discussed in the Standard Review Plan, Section 6.2.3, "Secondary Containment Function and Design," which references the requirements of 10 CFR Part 50, Appendix A, "General Design Criteria for Nuclear Power Plants" (Criterion 4, "Environmental and Dynamic Effects Design Basis," Criterion 16, "Containment Design," and Criterion 43, "Testing of Containment Atmosphere Cleanup Systems").

### 3.0 TECHNICAL EVALUATION

#### 3.1 Background

The function of the secondary containment is to contain, dilute, and hold up fission products that may leak from primary containment following a design-basis accident. There are two principal accidents for which credit is taken for secondary containment integrity. These are a loss-of-coolant accident and a fuel-handling accident inside secondary containment. The secondary containment performs no active function in response to either of these limiting events; however, its integrity and leak tightness are required to ensure that the release of radioactive materials and fission products entrapped within the secondary containment structure will be treated by the standby gas treatment system prior to discharge to the environment.

The dual-unit, secondary containment design at SSES 1 and 2 encompasses three zones which are all required to be operable during dual unit operation. The design also encompasses access doors between these zones. In a few instances, the access opening between zones is via a single door.

The flexibility proposed by PPL was identified in TS Task Force 18 (TSTF-18), Revision 1, which is incorporated into NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," Revision 2, dated June 2001 and approved in a letter dated October 2, 1998. An allowance for opening these doors for entry and exit was relocated to the Bases as part of the SSES 1 and 2 conversion to the Improved Standard TSs (ISTs) in Amendments Nos. 178 and 151 dated July 30, 1998 (ADAMS Accession No. ML010160119). This results in a conflict between SSES 1 and 2 TS SR 3.6.4.1.3 and the Bases allowance. As such, PPL proposes to add an explicit note to SR 3.6.4.1.3 to allow entry and exit between required secondary containment zones where there is a single door.

A condition report (CR) was written to identify the situation where certain single door accesses between secondary containment zones were not labeled or placarded to reflect that during exit and entry, these doors must be administratively controlled or an entry into a secondary

containment LCO must be made. During the resolution of this CR, it was determined that the TSs prior to conversion to ISTSs contained an allowance to provide for ingress and egress through single door accesses between secondary containment zones. While this allowance was relocated to the Bases during the conversion to STSs, this proposal is requested by PPL to restore this allowance to the TSs.

### 3.2 PPL's Proposed Change

The proposed Amendment revises the SSES 1 and 2 TSs SR 3.6.4.1.3 to require that only one secondary containment access door in each access opening be verified closed. This portion of the change is consistent with TSTF-18, Revision 1, and NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4 [boiling water reactor]," Revision 2, dated June 2001. Additionally, this surveillance includes a Note allowing entry and exit between required secondary containment zones that have a single door. This Note was not included in TS Amendment Nos. 178 and 151 for SSES 1 and 2, respectively.

### 3.3 Technical Evaluation

Currently, SSES 1 and 2 TSs require that each secondary containment access door in each access opening be closed, with an exception for one door being open when being used for entry and exit provided that at least one door remain closed. Without this change, performing maintenance activities that require a single access door to be open for reasons other than entry and exit would result in entry into LCO 3.6.4.1. The current TS for SSES 1 and 2 would require that if the secondary containment was not restored to operable status in 4 hours (action A.1), the plant shall be in Mode 3 in 12 hours (action B.1) and Mode 4 in 36 hours (action B.2).

PPL has proposed to revise the SSES 1 and 2 TS SR 3.6.4.1.3 to require that only one secondary containment access door in each access opening be verified closed, and allow entry and exit access between required secondary containment zones. The proposed TS changes are consistent with TSTF-18, Revision 1, and NUREG-1433, Revision 2, and, therefore, are acceptable.

In addition, the proposed note to permit opening single door access openings between required zones within secondary containment boundary for entry and exit is acceptable because the door will only be open for a brief time for entry and exit purposes. This is consistent with the intent reflected in the SSES 1 and 2 Bases changes, which were provided for information in PPL's March 5, 2004, submittal. PPL indicated in a July 29, 2005, teleconference, that the Bases will explicitly state that the allowance applies only for ingress and egress. Performing maintenance activities that require a single access door to be open for reasons other than entry and exit would result in entry into LCO 3.6.4.1, Action A.

Furthermore, there are no features specific to this facility that would preclude implementation of the changes endorsed in NUREG-1433, Revision 2, related to secondary containment access doors. Therefore, the proposed change is acceptable.

### 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 and change surveillance requirements. 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 (69 FR 22882). 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: R. Guzman  
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Date: August 16, 2005