(4) PPL Susquehanna, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(5) PPL Susquehanna, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

PPL Susquehanna, LLC is authorized to operate the facility at reactor core power levels not in excess of 3489 megawatts thermal in accordance with the conditions specified herein and in Attachment 1 to this license. The preoperational tests, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 245, 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.

For Surveillance Requirements (SRs) that are new in Amendment 178 to Facility Operating License No. NPF-14, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 178. For SRs that existed prior to Amendment 178, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment 178.

(3) Conduct of Work Activities During Fuel Load and Initial Startup

The operating licensee shall review by committee all facility construction, Preoperational Testing, and System Demonstration activities performed concurrently with facility initial fuel loading or with the facility Startup Test

3.7 PLANT SYSTEMS TS/3.7-1
3.7.1 Residual Heat Removal Service Water (RHRSW) System and the Ultimate Heat Sink (UHS) TS/3.7-1
3.7.2 Emergency Service Water (ESW) System 3.7-4
3.7.3 Control Room Emergency Outside Air Supply (CREOAS) System TS/3.7-6
3.7.4 Control Room Floor Cooling System 3.7-10
3.7.5 Main Condenser Offgas 3.7-13
3.7.6 Main Turbine Bypass System TS/3.7-15
3.7.7 Spent Fuel Storage Pool Water Level 3.7-17

3.8 ELECTRICAL POWER SYSTEMS TS/3.8-1
3.8.1 AC Sources – Operating TS/3.8-1
3.8.2 AC Sources – Shutdown TS/3.8-17
3.8.3 Diesel Fuel Oil, Lube Oil, and Starting Air TS/3.8-20
3.8.4 DC Sources – Operating 3.8-23
3.8.5 DC Sources – Shutdown 3.8-29
3.8.6 Battery Parameters TS/3.8-32
3.8.7 Distribution Systems – Operating TS/3.8-37
3.8.8 Distribution Systems – Shutdown TS/3.8-41

3.9 REFUELING OPERATIONS 3.9-1
3.9.1 Refueling Equipment Interlocks 3.9-1
3.9.2 Refuel Position One-Rod-Out Interlock 3.9-3
3.9.3 Control Rod Position 3.9-5
3.9.4 Control Rod Position Indication 3.9-6
3.9.5 Control Rod OPERABILITY – Refueling 3.9-8
3.9.6 Reactor Pressure Vessel (RPV) Water Level 3.9-9
3.9.7 Residual Heat Removal (RHR) – High Water Level 3.9-10
3.9.8 Residual Heat Removal (RHR) – Low Water Level 3.9-13

3.10 SPECIAL OPERATIONS TS/3.10-1
3.10.1 Inservice Leak and Hydrostatic Testing Operation TS/3.10-1
3.10.2 Reactor Mode Switch Interlock Testing 3.10-4
3.10.3 Single Control Rod Withdrawal – Hot Shutdown 3.10-6
3.10.4 Single Control Rod Withdrawal – Cold Shutdown 3.10-9
3.10.5 Single Control Rod Drive (CRD) Removal – Refueling 3.10-13
3.10.6 Multiple Control Rod Withdrawal – Refueling 3.10-16
3.10.7 Control Rod Testing-Operating 3.10-18
3.10.8 SHUTDOWN MARGIN (SDM) Test – Refueling 3.10-20

4.0 DESIGN FEATURES 4.0-1
4.1 Site Location 4.0-1
4.2 Reactor Core 4.0-1
4.3 Fuel Storage 4.0-1

(continued)

3.10 SPECIAL OPERATIONS

3.10.1 Inservice Leak and Hydrostatic Testing Operation

LCO 3.10.1 The average reactor coolant temperature specified in Table 1.1-1 for Mode 4 may be changed to 212°F, and operation considered not to be in MODE 3; and the requirements of LCO 3.4.9, "Residual Heat Removal (RHR) Shutdown Cooling System - Cold Shutdown," may be suspended to allow reactor coolant temperature > 200°F:

- For performance of an inservice leak or hydrostatic test,
- As a consequence of maintaining adequate pressure for an inservice leak or hydrostatic test, or
- As a consequence of maintaining pressure for control rod scram time testing initiated in conjunction with an inservice leak or hydrostatic test,

provided the following LCOs are met:

a. LCO 3.3.6.2, "Secondary Containment Isolation Instrumentation," Functions 1, 3, 4, 5, 6, 7 and 8 of Table 3.3.6.2-1;

b. LCO 3.6.4.1, "Secondary Containment";

c. LCO 3.6.4.2, "Secondary Containment Isolation Valves (SCIVs)"; and

d. LCO 3.6.4.3, "Standby Gas Treatment (SGT) System."

APPLICABILITY: MODE 4 with average reactor coolant temperature >200°F and ≤ 212°F.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

PPL SUSQUEHANNA, LLC

ALLEGHENY ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-388

SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 223
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 June 8, 2007, 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. 223 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

Mark G. Kowal, Chief
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the License and
Technical Specifications

Date of Issuance:

ATTACHMENT TO LICENSE AMENDMENT NO. 223

FACILITY OPERATING LICENSE NO. NPF-22

DOCKET NO. 50-388

Replace the following page of the Facility Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

REMOVE	INSERT
3	3

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	INSERT
TS/TOC-1	TS/TOC-1
TS/TOC-3	TS/TOC-3
TS/3.10-1	TS/3.10-1

(4) PPL Susquehanna, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(5) PPL Susquehanna, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

PPL Susquehanna, LLC is authorized to operate the facility at reactor core power levels not in excess of 3489 megawatts thermal (100% power) in accordance with the conditions specified herein and in Attachment 1 to this license. The preoperational test, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 223, 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.

For Surveillance Requirements (SRs) that are new in Amendment 151 to Facility Operating License No. NPF-22, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 151. For SRs that existed prior to Amendment 151, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment 151.

2.C.(3) PPL Susquehanna, LLC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Fire Protection Review Report for the facility and as approved in Fire Protection Program, Section 9.5, SER, SSER#1, SSER#2, SSER#3, SSER#4, SSER#6, Safety Evaluation of Fire Protection Report dated August 9, 1989, Safety Evaluation

1.0 USE AND APPLICATION 1.1-1
1.1 Definitions 1.1-1
1.2 Logical Connectors 1.2-1
1.3 Completion Times 1.3-1
1.4 Frequency 1.4-1

2.0 SAFETY LIMITS (SLs) TS/2.0-1
2.1 SLs TS/2.0-1
2.2 SL Violations ..... TS /2.0-1

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY TS/3.0-1
3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY TS/3.0-4

3.1 REACTIVITY CONTROL SYSTEMS 3.1-1
3.1.1 Shutdown Margin (SDM) 3.1-1
3.1.2 Reactivity Anomalies 3.1-5
3.1.3 Control Rod OPERABILITY 3.1-7
3.1.4 Control Rod Scram Times TS/3.1-12
3.1.5 Control Rod Scram Accumulators 3.1-15
3.1.6 Rod Pattern Control 3.1-18
3.1.7 Standby Liquid Control (SLC) System 3.1-20
3.1.8 Scram Discharge Volume (SDV) Vent and Drain Valves TS/3.1-25

3.2 POWER DISTRIBUTION LIMITS 3.2-1
3.2.1 Average Planar Linear Heat Generation Rate (APLHGR) 3.2-1
3.2.2 Minimum Critical Power Ratio (MCPR) 3.2-3
3.2.3 Linear Heat Generation Rate (LHGR) 3.2-5

3.3 INSTRUMENTATION 3.3-1
3.3.1.1 Reactor Protection System (RPS) Instrumentation TS/3.3-1
3.3.1.2 Source Range Monitor (SRM) Instrumentation 3.3-10

3.3.2.1 Control Rod Block Instrumentation 3.3-16
3.3.2.2 Feedwater – Main Turbine High Water Level Trip Instrumentation 3.3-21
3.3.3.1 Post Accident Monitoring (PAM) Instrumentation TS/3.3-23
3.3.3.2 Remote Shutdown System TS/3.3-27
3.3.4.1 End of Cycle Recirculation Pump Trip (EOC-RPT) Instrumentation 3.3-30
3.3.4.2 Anticipated Transient Without Scram Recirculation Pump Trip (ATWS-RPT) Instrumentation 3.3-34
3.3.5.1 Emergency Core Cooling System (ECCS) Instrumentation TS/3.3-37
3.3.5.2 Reactor Core Isolation Cooling (RCIC) System Instrumentation 3.3-48
3.3.6.1 Primary Containment Isolation Instrumentation TS/3.3-52
3.3.6.2 Secondary Containment Isolation Instrumentation 3.3-63
3.3.7.1 Control Room Emergency Outside Air Supply (CREOAS) System Instrumentation 3.3-67

(continued)

3.7 PLANT SYSTEMS TS/3.7-1
3.7.1 Residual Heat Removal Service Water (RHRSW) System and the Ultimate Heat Sink (UHS) TS/3.7-1
3.7.2 Emergency Service Water (ESW) System 3.7-4
3.7.3 Control Room Emergency Outside Air Supply (CREOAS) System TS/3.7-6
3.7.4 Control Room Floor Cooling System 3.7-10
3.7.5 Main Condenser Offgas 3.7-13
3.7.6 Main Turbine Bypass System TS/3.7-15
3.7.7 Spent Fuel Storage Pool Water Level 3.7-17

3.8 ELECTRICAL POWER SYSTEMS TS/3.8-1
3.8.1 AC Sources – Operating TS/3.8-1
3.8.2 AC Sources – Shutdown TS/3.8-19
3.8.3 Diesel Fuel Oil, Lube Oil, and Starting Air TS/3.8-23
3.8.4 DC Sources – Operating 3.8-26
3.8.5 DC Sources – Shutdown 3.8-34
3.8.6 Battery Parameters TS/3.8-39
3.8.7 Distribution Systems – Operating TS/3.8-44
3.8.8 Distribution Systems – Shutdown 3.8-50

3.9 REFUELING OPERATIONS 3.9-1
3.9.1 Refueling Equipment Interlocks 3.9-1
3.9.2 Refuel Position One-Rod-Out Interlock 3.9-3
3.9.3 Control Rod Position 3.9-5
3.9.4 Control Rod Position Indication 3.9-6
3.9.5 Control Rod OPERABILITY – Refueling 3.9-8
3.9.6 Reactor Pressure Vessel (RPV) Water Level 3.9-9
3.9.7 Residual Heat Removal (RHR) – High Water Level 3.9-10
3.9.8 Residual Heat Removal (RHR) – Low Water Level 3.9-13

3.10 SPECIAL OPERATIONS TS/3.10-1
3.10.1 Inservice Leak and Hydrostatic Testing Operation TS/3.10-1
3.10.2 Reactor Mode Switch Interlock Testing 3.10-4
3.10.3 Single Control Rod Withdrawal – Hot Shutdown 3.10-6
3.10.4 Single Control Rod Withdrawal – Cold Shutdown 3.10-9
3.10.5 Single Control Rod Drive (CRD) Removal – Refueling 3.10-13
3.10.6 Multiple Control Rod Withdrawal – Refueling 3.10-16
3.10.7 Control Rod Testing – Operating 3.10-18
3.10.8 SHUTDOWN MARGIN (SDM) Test – Refueling 3.10-20

4.0 DESIGN FEATURES TS/4.0-1
4.1 Site Location TS/4.0-1
4.2 Reactor Core TS/4.0-1
4.3 Fuel Storage TS/4.0-1

(continued)

3.10 SPECIAL OPERATIONS

3.10.1 Inservice Leak and Hydrostatic Testing Operation

LCO 3.10.1 The average reactor coolant temperature specified in Table 1.1-1 for Mode 4 may be changed to 212°F, and operation considered not to be in MODE 3; and the requirements of LCO 3.4.9, "Residual Heat Removal (RHR) Shutdown Cooling System - Cold Shutdown," may be suspended to allow reactor coolant temperature > 200°F:

- For performance of an inservice leak or hydrostatic test,
- As a consequence of maintaining adequate pressure for an inservice leak or hydrostatic test, or
- As a consequence of maintaining adequate pressure for control rod scram time testing initiated in conjunction with an inservice leak or hydrostatic test,

provided the following LCOs are met:

a. LCO 3.3.6.2, "Secondary Containment Isolation Instrumentation," Functions 1, 3, 4, 5, 6, 7 and 8 of Table 3.3.6.2-1;

b. LCO 3.6.4.1, "Secondary Containment";

c. LCO 3.6.4.2, "Secondary Containment Isolation Valves (SCIVs)"; and

d. LCO 3.6.4.3, "Standby Gas Treatment (SGT) System."

APPLICABILITY: MODE 4 with average reactor coolant temperature >200°F and ≤ 212°F.