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U. S. Nuclear Regulatory Commission
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Washington, D.C. 20555

SUSQUEHANNA STEAM ELECTRIC STATION
PROPOSED LICENSE TRANSFER: REVISION
TO CONFORMING LICENSE AMENDMENTS
PLA-5178

Docket Nos. 50-387
and 50-388

Reference: PLA-5135, R. G. Byram to USNRC, "Proposed Amendment No. 229 to License NPF-14 and Proposed Amendment No. 192 to License NPF-22: Proposed License Transfer and Conforming License Amendments PP&L, Inc. Realignment," dated December 15, 1999.

The purpose of this letter is to transmit revised Conforming License Amendments in connection with the referenced pending request for approval of the PP&L, Inc. Realignment resulting in the transfer of PP&L, Inc.'s interests in the operating licenses for Susquehanna SES. There is no material change to the requested amendments. However, the amendments have been revised slightly to accurately reflect the proposed transfer, and they supersede Attachment 1 of the referenced submittal in its entirety.

The revisions to the conforming amendments do not affect the No Significant Hazards Considerations provided with the application for license transfer. The revised amendments do "no more than conform the license to reflect the transfer action" and, therefore, continue to meet the requirements of the generic determination regarding license amendments to reflect transfers provided in 10 C.F.R. §2.1315(a).

Any questions related to this letter should be directed to Mr. T. L. Harpster, Manager - Nuclear Licensing, at (610) 774-7504.

Sincerely,

Robert G. Byram

Attachments: 1. Affidavit
2. Revised Administrative Amendments to Operating Licenses

cc: NRC Region I
Mr. R. G. Schaaf, NRC Project Manager - OWFN
Mr. S. L. Hansell, NRC Sr. Resident Inspector - SSES
Mr. R. Osborne, Allegheny Electric
Mr. D. J. Allard, Pa. DEP
Mr. R. S. Wood, NRC/NRR - OWFN
Mr. S. R. Hom, NRC/OGC – OWFN

BEFORE THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of :

PPL ELECTRIC UTILITIES CORPORATION
(formerly PP&L, INC.) : Docket No. 50-387

PROPOSED LICENSE TRANSFER: REVISION TO CONFORMING LICENSE AMENDMENTS SUSQUEHANNA STEAM ELECTRIC STATION UNIT NO. 1

Licensee, PPL Electric Utilities Corporation (formerly PP&L, Inc.), hereby files a revision to proposed Amendment No. 229 to its Facility Operating License No. NPF-14 dated July 17, 1982.

This amendment contains a revision to the Susquehanna SES Unit 1 Operating License.

PPL ELECTRIC UTILITIES CORPORATION
BY:

R. G. Byram
Sr. Vice-President and Chief Nuclear Officer

Sworn to and subscribed before me
this 28th day of April, 2000.

Francine A. Greenzweig

Notary Public

NOTARIAL SEAL
FRANCINE A. GREENZWEIG, Notary Public
City of Allentown, Lehigh County, PA
My Commission Expires Oct. 29, 2002

BEFORE THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of :

PPL ELECTRIC UTILITIES CORPORATION
(formerly PP&L, INC.) : Docket No. 50-388

PROPOSED LICENSE TRANSFER: REVISION TO CONFORMING LICENSE AMENDMENTS SUSQUEHANNA STEAM ELECTRIC STATION UNIT NO. 2

Licensee, PPL Electric Utilities Corporation (formerly PP&L, Inc.), hereby files a revision to proposed Amendment No. 192 to its Facility Operating License No. NPF-22 dated March 23, 1984.

This amendment contains a revision to the Susquehanna SES Unit 2 Operating License.

PPL ELECTRIC UTILITIES CORPORATION
BY:

R. G. Byram
Sr. Vice-President and Chief Nuclear Officer

Sworn to and subscribed before me
this 28th day of April, 2000.

Francine A. Greenzweig
Notary Public

NOTARIAL SEAL
FRANCINE A. GREENZWEIG, Notary Public
City of Allentown, Lehigh County, PA
My Commission Expires Oct. 29, 2002

~~PP&L, Inc.~~PPL Susquehanna, LLC
Allegheny Electric Cooperative, Inc.
Docket No. 50-387
Susquehanna Steam Electric Station, Unit 1
Facility Operating License

License No. NPF-14

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:

   A. The application for a license filed by the ~~PP&L, Inc.~~PPL Susquehanna, LLC and the Allegheny Electric Cooperative, Inc. (the licensees)[#] 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, and all required notifications to other agencies or bodies have been duly made;

   B. Construction of the Susquehanna Steam Electric Station, Unit 1 (the facility), has been substantially completed in conformity with Construction Permit CPPR-101 and the application, as amended, the provisions of the Act, and the regulations of the Commission;

   C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;

   D. There is reasonable assurance: (i) that the activities authorized by this operating license 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;

   E. The ~~PP&L, Inc.~~PPL Susquehanna, LLC[*] is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

[#] The original applications for the operating license and construction permit were submitted by Pennsylvania Power & Light Company and Allegheny Electric Cooperative, Inc. For purposes of certain historical references contained herein, the term "operating licensee" is used to refer to PPL Susquehanna, LLC, as well as Pennsylvania Power & Light Company and PP&L, Inc., both of which were previously named in the license with authority to operate the facility.

[*] The ~~PP&L, Inc.~~PPL Susquehanna, LLC is authorized to act as agent for the Allegheny Electric Cooperative, Inc. and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

F. The licensees have satisfied the applicable provisions of 10 CFR 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. NPF-14 subject to the condition for protection of the environment set forth herein, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and

I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.

2. Based on the foregoing findings and the Initial Decision issued by the Atomic Safety and Licensing Board on April 12, 1982, regarding this facility, Facility Operating License No. NPF-14 is hereby issued to the ~~PP&L, Inc.~~PPL Susquehanna, LLC and the Allegheny Electric Cooperative, Inc. to read as follows:

A. This license applies to the Susquehanna Steam Electric Station, Unit 1, a boiling water nuclear reactor and associated equipment (the facility), owned by the licensees. The facility is located in Luzerne County, Pennsylvania, and is described in the licensees' Final Safety Analysis Report as supplemented and amended, and the licensees' Environmental Report as supplemented and amended.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

(1) Pursuant to Section 103 of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities", ~~PP&L, Inc.~~PPL Susquehanna, LLC ~~(PP&L)~~ and the Allegheny Electric Cooperative, Inc. to possess, and ~~PP&L~~PPL Susquehanna, LLC to use, and operate the facility at the designated location in Luzerne County, Pennsylvania, in accordance with the procedures and limitations set forth in this license;

(2) ~~PP&L~~PPL Susquehanna, LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts

required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;

(3) ~~PP&L~~PPL Susquehanna, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed neutron sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) ~~PP&L~~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) ~~PP&L~~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

~~PP&L, Inc.~~PPL Susquehanna, LLC (~~PP&L~~) is authorized to operate the facility at reactor core power levels not in excess of 3441 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. 185, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. ~~PP&L~~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~~PP&L~~ 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 Program to assure that the activity will not affect the safe performance of the facility fuel loading or the portion of the facility Startup Program being performed. The review shall address, as a minimum, system interaction, span of control, staffing, security and health physics, with respect to performance of the activity concurrently with the facility fuel loading or the portion of the facility Startup Program being performed. The committee for the review shall be composed of a least three members, knowledgeable in the above areas, and who meet the qualifications for professional-technical personnel specified by section 4.4 of ANSI N18.7-1971. At least one of these three shall be a senior member of the Assistant Superintendent of Plant's staff.

(4) Thermal and Hydraulic Design (Section 4.4, SER)

(a) ~~PP&L~~PPL Susquehanna, LLC is prohibited from power operation under natural circulation conditions.

(5) Qualification of Purge Valves (Section 6.2.4, SSER#1; 22, SSER#4)

Whenever the operational condition is other than cold shutdown or refueling, the operating licensee~~PP&L~~ shall maintain each containment purge and vent isolation valve greater than 2-in. nominal diameter in one of the following conditions:

(a) Closed and electrically prohibited from opening,

(b) Blocked so as not to permit opening by more than 50 degrees,

or

(c) Operated to permit opening by more than 50 degrees after demonstrating that the valves are qualified to close from the full open position against peak LOCA pressure, and are also qualified per the criteria of Branch Technical Position CSB 6-4. Purge valve qualification documentation must be approved by the NRC prior to operating valves in this mode.

(6) Fire Protection Program (Section 9.5, SER, SSER#1, SSER#2, SSER#3)

~~PP&L~~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 of Revision 4 to the Fire Protection Review Report dated March 29, 1993, Safety Evaluation of Fire Protection Program Issues, Safe Shutdown Methodology and Analysis of Associated Circuits dated October 21, 1997, and Safety Evaluation of the licensees' Amendment No. 177, dated June 24, 1998, to relocate the Fire Protection Program subject to the following provision:

The operating licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(7) Battery Room Area (Section 9.5.4, SER, SSER#1, SSER#3)

Prior to exceeding five percent of full power and subject to NRC review and approval, the operating licensee~~PP&L~~ shall either conduct at an approved testing laboratory an ASTM E-119 test of the as-installed one-hour cable wrap configuration or install an automatic fire extinguishing system.

(8) Operation with Partial Feedwater Heating at End-of-Cycle (Section 15.1, SER, SSER# 1)

Prior to operation with partial feedwater heating, ~~PP&L~~PPL Susquehanna, LLC shall provide for NRC review and approval, analyses which show a more limiting change does not occur in the minimum critical power ratio than that obtained using normal feedwater

heating.

(9) Initial Test Program (Section 14, SER, SSER#1)

The operating licensee~~PP&L~~ shall conduct the post-fuel-loading initial test program (set forth in Section 14 of the licensees' Final Safety Analysis Report, as amended through Amendment 50 and modified by the operating licensee's~~PP&L~~ letter dated August 26, 1982, (PLA-1257)) without making any major modifications of this program unless modifications have been identified and have received prior NRC approval. Major modifications are defined as:

(a) Elimination of any test identified as essential in Section 14 of the licensees' Final Safety Analysis Report, as amended through Amendment 50 and modified by the operating licensee's~~PP&L~~ letter dated August 26, 1982, (PLA-1257);

(b) Modifications of test objectives, methods or acceptance criteria for any test identified as essential in Section 14 of the ~~licensee's~~ licensees' Final Safety Analysis Report, as amended through Amendment 50 and modified by the operating licensee's~~PP&L~~ letter dated August 26, 1982, (PLA-1257);

(c) Performance of any test at a power level different from that described in the program; and

(d) Failure to complete any tests included in the described program (planned or scheduled for power levels up to the authorized power level).

(10) Inservice Inspection Program (Section 5.2.4 and 6.6, SER, SSER#1, SSER#3)

By June 30, 1983, the operating licensee~~PP&L~~ shall submit a revised inservice inspection program for NRC review and approval.

(11) Seismic System Analysis (Section 3.7.2, SSER#3)

By the dates indicated, the operating licensee~~PP&L~~ shall provide documentation to the NRC for review which states the results of recheck of all calculations associated with calculating masses, section properties, and spring stiffnesses used in stick models for the following structures:

(a)	Containment	July 30, 1982
(b)	Reactor/Control Structure (Vertical model)	August 25, 1982
(c)	Diesel Generator Building	August 25, 1982
(d)	Engineering Safeguard Service Water Pumphouse	August 25, 1982

(12) Radon (ASLB Initial Decision, Paragraph 223)

This license will be subject to the ultimate outcome of the consolidated radon proceeding currently underway before the Appeal Boards in Docket Nos. 50-277, 50-278, 50-320, 50-354 and 50-355.

(13) Nearby Facilities (Section 2.2.2, SSER#3, SSER#4)

(a) The operating licensee~~PP&L~~ shall submit a complete report for NRC review and approval delineating interim gas line flow restrictions to 39 m^3/sec of natural gas.

(b) By December 31, 1982, the approved interim gas line flow restrictions and procedures addressing system configuration changes shall be implemented.

(c) By February 28, 1983, the operating licensee~~PP&L~~ shall submit a report for NRC review and approval describing either:

(1) Permanent modifications which limit flow to 39 m^3/sec, or

(2) Relocation of the pipeline to a safe distance from the facility.

(d) By September 30, 1984, the selected modification or relocation of the pipeline shall be completed.

(14) Seismic and Loss-of-Coolant Accident Loads (Section 4.2.3, SSER #3)

By August 30, 1982, the operating licensee~~PP&L~~ shall submit to NRC a complete description of the analytical methods along with analytical results with regard to fuel bundle liftoff. This submittal should contain information equivalent to that to be included in the General Electric

Topical Report (NEDE-21175-P) regarding fuel bundle liftoff.

(15) Control Room Design Review (Appendix F, SER, SSER#3)

By September 1, 1982, the operating licensee~~PP&L~~ shall complete correction of the following human engineering discrepancies as noted in Appendix F of the Safety Evaluation Report:

2.a.(3) Left/right convention on all controllers.
6.f. Unconventional labeling.

(16) Wetwell to Drywell Vacuum Breakers (Section 6.2.1.8, SSER#3, SSER#4)

Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall implement design modification on the wetwell/drywell vacuum breaker valves that include:

a) installation of new disc assemblies, new shaft bearing caps; and

b) replacement of the shaft, keys and turnbuckle with stronger materials.

(17) Scram Discharge System Piping (Section 4.6, SER, SSER#1, SSER#2, SSER#3)

(a) Within 60 days of the issuance of the BWR Owner's Group Report regarding modifications to the Emergency Procedure Guidelines, the operating licensee shall submit a report addressing the Emergency Procedure Guidelines with regard to Scram Discharge Volume (SDV) pipe breaks. The operating licensee~~PP&L~~ shall implement any required system or procedural modifications on a schedule acceptable to the NRC staff.

(b) Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall incorporate the following additional modifications into the scram discharge volume system:

(1) Redundant vent and drain valves, and

(2) Diverse and redundant SDV instrumentation for each

instrumented volume, including both delta pressure sensors and float sensors.

(18) Environmental Qualification (Section 3.11, SER, SSER#1, SSER#2, SSER#3, SSER#4)

(a) The operating licenseePP&L shall complete all actions related to environmental qualification of equipment on a schedule specified in Section 3.11 and Appendix 3.B of Supplement No. 3 of the Safety Evaluation Report with the exceptions of Section 3.11.5.(1) and Section 3.11.5.(2)(e).

(b) Complete and auditable records must be available and maintained at a central location which describe the environmental qualification methods used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with NUREG-0588, "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," Revision 1, dated July 1981. Such records shall be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified to document compliance with NUREG-0588.

(c) Prior to startup following the first refueling outage, the operating licenseePP&L shall be in compliance with the provisions of NUREG-0588 for safety-related electrical equipment exposed to a harsh environment.

(d) By April 15, 1983, the operating licenseePP&L shall implement the maintenance and surveillance schedule for components requiring initial maintenance and surveillance after the first year of operation.

(19) Assurance of Proper Design and Construction (Section 17.6, SSER #3, SSER#4)

(a) By December 31, 1982, the operating licenseePP&L shall review and categorize discrepancies on large pipe anchors outside containment.

(b) By December 31, 1982, the operating licenseePP&L shall restore to their original design requirements, discrepancies in

large pipe anchors outside containment requiring more complex analysis than used in the original design.

(20) Emergency Preparedness (Appendix D, SSER #1, SSER #2; 13.3, SSER#4)

By March 1, 1983, ~~PP&L~~ the operating licensee shall certify to the NRC staff the completion of the following offsite emergency preparedness items:

(a) Adequate supplies of KI for offsite emergency workers are obtained by the State of Pennsylvania to fulfill the existing State plan or a contingency plan is developed that reflects the inability to obtain supplies to support the existing State plan.

(b) Adequate supplies of dosimetry for offsite emergency workers are obtained by the State of Pennsylvania to implement the existing State plan or the State plan is revised accordingly.

(c) State and county plans are modified as necessary to account for the abandonment of the field Emergency Operations Center concept.

(21) School District Emergency Plans (ASLB Initial Decision, Paragraph 223)

This license will be subject to a finding (prior to operation at power levels exceeding five percent of full power) by the Director of Nuclear Reactor Regulation, in consultation with the Federal Emergency Management Agency, that all school districts within the plume exposure pathway emergency planning zone for the Susquehanna Steam Electric Station have completed written emergency plans to respond to fixed nuclear facility accidents.

(22) Municipality Transportation Resources (ASLB Initial Decision, Paragraph 223)

This license will be subject to a finding (prior to operation at power levels exceeding five percent of full power) by the Director of Nuclear Reactor Regulation, in consultation with the Federal Emergency Management Agency, that all municipalities within the plume exposure pathway emergency planning zone have completed their emergency response plans on the transportation resources and program.

(23) Seismic and Dynamic Qualification (Section 3.10, SER, SSER#1, SSER#3, SSER#4)

(a) Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall complete any modifications or replacement of equipment found necessary as a result of the operating licensee's fatigue evaluation program. In the interim, the operating licensee~~PP&L~~ shall document the occurrence of every safety relief valve discharge into the suppression pool; the associated cumulative damage factors shall be calculated for typical representative equipment and kept up-to-date; and the operating licensee~~PP&L~~ shall report to NRC any malfunction of equipment that occurs or should be suspected to have occurred due to any safety relief valve discharge.

(b) Prior to use, ~~PP&L~~the operating licensee shall complete qualification and documentation, as well as installation of the in-vessel rack.

(c) By December 31, 1982, the operating licensee~~PP&L~~ shall provide the completed final qualification report for Main Steam Isolation Value Actuator (HV-1F022A through D, HV-1F028 A through D) to the NRC staff for review.

(d) The operating licensee~~PP&L~~ shall implement the NRC staff's requirements after completion of the staff's review of the final qualification report for the Main Steam Isolation Valve Leakage Control System Heater (1E-203 A through D).

(e) Prior to exceeding the 25-cycle operational limit, the operating licensee~~PP&L~~ shall qualify the Recirculation Discharge Valve assemblies (HV-1F031 A and B) including new Limitorque actuators. The replacement actuators shall be wired for torque seating type operation.

(f) Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall fully qualify the following items to the SQRT criteria and provide the final qualification reports to the NRC staff for review.

1) CRD vent and drain valves (C12-F010/F011)
2) Power Range Monitor Cabinet (H12-P608)
3) Level Switch (E41-N014)
4) Level Switch - Condensate Storage Tanks, Suppression

Pool, HCPI Turbine Exhaust Drain Pot (E41-N002/N003, N015, N018)

5) High Pressure Coolant Injection Turbine (15-211)

(24) Containment Purge System (Section 6.2.4, SER)

Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall install design features (e.g. screens) on the containment purge system to prevent blocking of the purge and vent valves by debris produced in an accident.

(25) Additional Instrumentation and Control Concerns (Section 7.7.2, SER, SSER #2)

Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall resolve the following concerns to the NRC's satisfaction:

(a) whether common electrical power sources or sensor malfunctions may cause multiple control systems failures, and

(b) whether high energy line breaks will result in unacceptable consequential control system failures.

(26) Surveillance of Control Blade (Section 4.2.3, SER)

(Deleted)

(27) Emergency Diesel Engine Starting Systems (Section 9.6.3, SER)

Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall install air dryers upstream of the air receivers.

(28) NUREG-0737 Conditions (Section 22, SER)

The operating licensee~~PP&L~~ shall complete the following conditions to the satisfaction of the NRC. These conditions reference the appropriate items in Section 22.2, "TMI Action Plan Requirements for Applicants for Operating Licenses," in the Safety Evaluation Report and Supplements 1, 2 and 3, NUREG-0776.

(a) Nuclear Steam Supply System Vendor Review of Procedures (I.C.7, SER, SSER #1)

Prior to beginning low-power testing, the operating licensee~~PP&L~~ shall assure that the General Electric review of the power ascension test procedures has been completed and the General Electric recommendations have been incorporated.

(b) Special Low Power Testing and Training (I.G.1,SER, SSER#3)

(Deleted)

(c) Post Accident Sampling(II.B.3, SER, SSER#1, SSER#3)

Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall provide to NRC a revised procedure for core damage estimation to incorporate the requirements in Section 22.2, II.B.3 of Supplement No. 3 of the Safety Evaluation Report.

(d) Instrumentation for Detection of Inadequate Core Cooling (II.F.2, SER, SSER#1, SSER#3)

(i) By August 31, 1982, the operating licensee~~PP&L~~ shall submit a report addressing the analysis performed by the BWR Owners Group regarding additional instrumentation relative to inadequate core cooling and shall implement the staff's requirements after the completion of the staff's review of this report.

(ii) By October 31, 1982, the operating licensee~~PP&L~~ shall submit its proposal for conforming with item II.F.2 of NUREG-0737 in view of the BWR Owners Group report.

(e) Modification of Automatic Depressurization System Logic (II.K.3.18, SER, SSER#1, SSER#2, SSER#3)

(a) By October 1, 1982, the operating licensee~~PP&L~~ shall evaluate the alternative design modifications of the BWR Owners Group relative to the logic for the automatic depressurization system, submit such

evaluation, and propose modifications to the NRC for review and approval.

(b) Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall implement the approved alternative logic modification of the automatic depressurization system.

(f) Effect of Loss of Power on Alternating Current Pump Seals (II.K.3.25, SER, SSER#1)

Prior to startup after the first refueling, the operating licensee~~PP&L~~ shall provide an emergency power supply to the cooling system for the recirculation pump seals.

(g) Upgrade Emergency Support Facilities (III.A.1.2, SER, SSER #1, SSER #2)

The operating licensee~~PP&L~~ shall complete its Emergency Response Facilities as follows:

(1) Safety Parameter Display System - December 30, 1983
(2) Emergency Operations Facility - October 1, 1982
(3) Technical Support Center - October 1, 1982

(29) SRV Inplant Test (Section 6.2.1.8, SER; 6.2.1.5, SSER#1)

Within 90 days following the staff receipt of the report providing the results of the inplant SRV test at the LaSalle, Unit 1 facility, the operating licensee~~PP&L~~ shall furnish the results of its evaluation and application of the LaSalle data to assure that for Susquehanna Unit 1, the $\triangle$ T between bulk and local pool temperatures will not exceed 10°F.

(30) Dynamic Testing and Analysis of Systems, Components, and Equipment (Section 3.9.2, SSER#4)

(a) By April 1, 1983, the operating licensee~~PP&L~~ shall provide to the NRC staff detailed analysis or testing results which demonstrate that the feedwater isolation valves can adequately perform their intended function and satisfy the requirements of General Design Criteria (GDC) 54 and 55 following a feedwater line break outside containment.

(b) Prior to exceeding five percent of full power, the operating

licensee~~PP&L~~ shall verify that all check valves relied upon for containment isolation, either within or outside containment, are dynamically qualified or the operating licensee~~PP&L~~ shall provide a basis for continued operation and a program for qualifying such valves.

(31) Control Room Design Review (Section 22, SSER #4)

Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall provide a report discussing the experience, including demonstrated reliability, of the Display Control System.

(32) Emergency Service Water System (Section 6.3.4, SSER #4)

Prior to startup following the first refueling outage, the operating licensee~~PP&L~~ shall complete design modifications to the emergency service water (ESW) system, approved by the staff, to eliminate single failure in the ESW system which leads to the need for an uncooled residual heat removal (RHR) pump.

(33) Additional Conditions

The Additional Conditions contained in Appendix C, as revised through Amendment No. 178, are hereby incorporated into this license. ~~PP&L~~PPL Susquehanna, LLC shall operate the facility in accordance with the Additional Conditions.

D. The operating licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Susquehanna Steam Electric Station Physical Security Plan," with revisions submitted through September 24, 1987; "Susquehanna Steam Electric Station Guard Training and Qualification Plan," with revisions submitted through May 28, 1985; and "Susquehanna Steam Electric Station Safeguards Contingency Plan," with revisions submitted through September 24, 1987. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedules set forth therein.

E. Exemptions from certain requirements of Appendices G and H to 10 CFR Part 50 are described in the Safety Evaluation Report and Supplements 1 and 2 to

the Safety Evaluation Report. In addition, an exemption was requested until receipt of new fuel for first refueling from the requirements for criticality monitors in the spent fuel pool area, 10 CFR Part 70.24. Also, an exemption was requested from the requirements of Appendix J of 10 CFR Part 50 for the first fuel cycle when performing local leak rate testing of Residual Heat Removal (RHR) relief valves in accordance with Technical Specification 4.6.1.2. This latter exemption is described in the safety evaluation of License Amendment No. 13. These exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest, and have been granted pursuant to 10 CFR 50.12. Except as here exempted, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, and the rules and regulations of the Commission and the provisions of the Act.

F. This license is subject to the following additional condition for the protection of the environment:

Before engaging in additional construction or operational activities which may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the Final Environmental Statement and its Addendum, ~~PP&L~~PPL Susquehanna, LLC shall provide a written notification to the Director of the Office of Nuclear Reactor Regulation and receive written approval from that office before proceeding with such activities.

G. ~~PP&L~~PPL Susquehanna, LLC shall report any violations of the requirements contained in Section 2, Items C(1), C(3) through C(32), and F of this license within twenty-four (24) hours. Initial notification shall be made in accordance with the provisions of 10 CFR 50.72 with written follow-up in accordance with the procedures described in 10 CFR 50.73 (b), (c), and (e).

H. ~~PP&L~~PPL Susquehanna, LLC shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

I. In accordance with the Commission's direction in its Statement of Policy, Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts, October 29, 1982, this license is subject to the final resolution of the pending litigation involving Table S-3. See, Natural Resources Defense Council v. NRC, No. 74-1586 (April 27, 1982).

J. This license is effective as of the date of issuance and shall expire at midnight on July 17, 2022.

3. Within 90 days after the effective date of this amendment, or such later time as the Commission may specify, ~~PP&L~~PPL Susquehanna, LLC shall satisfy any applicable requirement of P.L. 97-425 related to pursuing an agreement with the Secretary of Energy for the disposal of high-level radioactive waste and spent nuclear fuel.

Attachment 1

1. OUTSTANDING ITEM TO BE ACCOMPLISHED PRIOR TO LOADING FUEL

   a. Ground Reactor Protective System Cabling and Cabinetry as stated in Construction Deficiency Report 80-00-28 and conduct necessary testing.

2. OUTSTANDING ITEMS TO BE ACCOMPLISHED BEFORE INITIAL CRITICALITY

   a. Demonstrate recirculation loop riser double weld configuration acceptability.

   b. Demonstrate acceptability of loadings on equipment nozzles and of stress intensification factors on weld components.

   c. Verify and document proper seismic mounting of safety-significant temperature sensors.

   d. Verify and document that the instrumentation supplied by the NSSS vendor has the requisite accuracy in accordance with the design specifications.

   e. Provide for verifying operating activities in accordance with NUREG-0737 item I.C.6 and FSAR Section 18.1.13.

   f. Verify installation of additional post-accident monitoring instrumentation in accordance with NUREG-0737 item II.F.1 and FSAR Section 18.1.30.

   g. Implement a program for reducing leakage from potentially radioactive systems in accordance with NUREG-0737 item III.D.1.1 and FSAR Section 18.1.69.

   h. Verify installation of radioactive Iodine monitoring equipment inplant in accordance with NUREG-0737 item III.D.3.3 and FSAR Section 18.1.70.

   i. Verify that Unit 2 equipment used in Unit 1 is qualified and properly identified.

   j. Complete walkdown of welds requiring in-service-inspection and assure required accessibility has not been compromised by other equipment.

   k. Establish specific controls that assure calibration of equipment required by the Technical Specifications.

   l. Upon issue of the Operating License Technical Specifications, verify that

specified conditions, setpoints, and action points in facility procedures are consistent with those Technical Specifications.

m. Replace deficient Agastat GP relays in safety systems with qualified relays in accordance with the commitment documented in Inspection Report 50-387/82-17 Detail 2.

n. Demonstrate that stress analyses consider the effect of grouted pipe penetrations and show acceptability of the as-built configuration.

o. Evaluate vendor-supplied personnel monitoring equipment to assure appropriate equipment is being supplied to personnel in accordance with 10 CFR 20.202.

p. Establish a personnel neutron exposure monitoring program in accordance with 10 CFR 20.202.

q. Establish a whole body counting program, including thyroid calibration, in accordance with 10 CFR 20.201.

r. Establish controls to assure calibration of portable radiation monitoring equipment in accordance with 10 CFR 20.201.

3. OUTSTANDING ITEM TO BE COMPLETED BEFORE EXCEEDING 5% POWER

a. Correct the Emergency Service Water water hammer reported by the operating licensee's~~PP&L, Inc.~~ letter PLA 1129 dated June 18, 1982.

APPENDIX B

TO FACILITY OPERATING LICENSE NO. NPF-14

SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

~~PP&L, INC.~~PPL SUSQUEHANNA, LLC

DOCKET NOS. 50-387 AND 50-388

ENVIRONMENTAL PROTECTION PLAN

(NON-RADIOLOGICAL)

July 17, 1982

Amendment No. 180

Appendix C

Additional Conditions
Facility Operating License No. NPF-14
Docket No. 50-387

Amendment Number	Additional Conditions	Implementation Date
178	The operating licensee is authorized to relocate certain requirements included in Appendix A to operating licensee-controlled documents. Implementation of this amendment shall include the relocation of these requirements to the appropriate documents, as described in the operating licensee's letters dated August 1, 1996, as supplemented by letters dated November 26, 1997, January 6, March 2, April 24, and June 18, 1998, evaluated in the NRC staff's Safety Evaluation enclosed with this amendment.	This amendment is effective immediately and shall be implemented within 90 days of the date of this amendment. Dated: July 30, 1998

~~PP&L, Inc.~~PPL Susquehanna, LLC
Allegheny Electric Cooperative, Inc.
Docket No. 50-388
Susquehanna Steam Electric Station, Unit 2
Facility Operating License

License No. NPF-22

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:

   A. The application for a license filed by the ~~PP&L, Inc.~~PPL Susquehanna, LLC and the Allegheny Electric Cooperative, Inc. (the licensees)[#] 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, and all required notifications to other agencies or bodies have been duly made;

   B. Construction of the Susquehanna Steam Electric Station, Unit 2 (the facility), has been substantially completed in conformity with Construction Permit No. CPPR-102 and the application, as amended, the provisions of the Act, and the regulations of the Commission;

   C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;

   D. There is reasonable assurance: (i) that the activities authorized by this operating license 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;

   E. The ~~PP&L, Inc.~~PPL Susquehanna, LLC[*] is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

[#] The original application for the operating license and construction permit were submitted by Pennsylvania Power & Light Company and Allegheny Electric Cooperative, Inc. For purposes of certain historical references contained herein, the term "operating licensee" is used to refer to PPL Susquehanna, LLC, as well as Pennsylvania Power & Light Company and PP&L, Inc., both of which were previously named in the license with authority to operate the facility.

[*] The ~~PP&L, Inc.~~PPL Susquehanna, LLC is authorized to act as agent for the Allegheny Electric Cooperative, Inc. and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

F. The licensees have satisfied the applicable provisions of 10 CFR 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. NPF-22 subject to the condition for protection of the environment set forth herein, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and

I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.

2. Based on the foregoing findings regarding this facility, Facility Operating License No. NPF-22 is hereby issued to the ~~PP&L, Inc.~~PPL Susquehanna, LLC and the Allegheny Electric Cooperative, Inc. to read as follows:

A. This license applies to the Susquehanna Steam Electric Station, Unit 2, a boiling water nuclear reactor and associated equipment (the facility), owned by the licensees. The facility is located in Luzerne County, Pennsylvania, and is described in the licensees' Final Safety Analysis Report, as supplemented and amended, and the licensees' Environmental Report, as supplemented and amended.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

(1) Pursuant to Section 103 of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities", ~~PP&L, Inc.~~PPL Susquehanna, LLC ~~(PP&L)~~ and the Allegheny Electric Cooperative, Inc. to possess, and ~~PP&L~~PPL Susquehanna, LLC to use, and operate the facility at the designated location in Luzerne County, Pennsylvania, in accordance with the procedures and limitations set forth in this license;

(2) ~~PP&L~~PPL Susquehanna, LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts

required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;

(3) ~~PP&L~~PPL Susquehanna, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed neutron sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) ~~PP&L~~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) ~~PP&L~~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

~~PP&L, Inc.~~PPL Susquehanna, LLC ~~(PP&L)~~ is authorized to operate the facility at reactor core power levels not in excess of 3441 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. 159, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. ~~PP&L~~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.

(3) Fire Protection Program (Section 9.5, SER, SSER #1, SSER #2, SSER #3)

~~PP&L~~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 of Revision 4 to the Fire Protection Review Report dated March 29, 1993, Safety Evaluation of Fire Protection Program Issues, Safe Shutdown Methodology and Analysis of Associated Circuits dated October 21, 1997, and Safety Evaluation of the licensees' Amendment No. 150, dated June 24, 1998, to relocate the Fire Protection Program subject to the following provision:

The operating licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(4) Operation with Partial Feedwater Heating at End-of-Cycle (Section 15.1 SER, SSER #1)

~~PP&L~~PPL Susquehanna, LLC shall not operate with partial feedwater heating for the purpose of extending the normal fuel cycle unless acceptable justification is provided to and approved by the NRC staff prior to such operation.

(5) Initial Test Program (Section 14, SER, SSER #1)

The operating licensee~~PP&L~~ shall conduct the post-fuel-loading initial test program described in Section 14 of the Final Safety Analysis Report, as amended without making any major modifications unless such modifications have prior NRC approval. Major modifications are defined

as:

(a) Elimination of any safety-related test*;

(b) Modifications of objectives, test methods or acceptance criteria for any safety-related test;

(c) Performance of any safety-related test at a power level different from that stated in the licensees' Final Safety Analysis Report by more than 5 percent of rated power;

(d) Failure to satisfactorily complete the entire initial startup test program by the time core burnup equals 120 effective full power days;

(e) Deviation from initial test program administrative procedures or quality assurance controls described in the licensees' Final Safety Analysis Report; and

(f) Delays in the test program in excess of 30 days (14 days if power level exceeds 50 percent) concurrent with power operation. If continued power operation is desired during a delay, the operating licensee shall provide justification that adequate testing has been performed and evaluated to demonstrate that the facility can be operated at the planned power level with reasonable assurance that the health and safety of the public will not be endangered.

* Safety-related tests are those tests which verify the design, construction, and operation of safety-related systems, structures, and equipment.

(6) Inservice Inspection Program (Section 5.2.4 and 6.6, SER, SSER #1, SSER #3)

By March 1, 1985, the operating licensee~~PP&L~~ shall submit a revised inservice inspection program for NRC review and approval.

(7) Environmental Qualification (Section 3.11 SER, SSER #1, SSER #2, SSER #3, SSER #4, SSER #5, SSER #6)

Prior to March 31, 1985, the operating licensee shall environmentally qualify all electrical equipment according to the provisions of 10 CFR 50.49 except as follows:

(a) All modifications of Unit 2 equipment which are common with Unit 1 shall be completed prior to the startup following the first refueling outage for Unit 1 which is prior to November 30, 1985.

(b) Testing and qualification of conduit seals, silicone rubber insulated cable and NSIS cable shall be completed prior to November 30, 1985.

(c) Modifications to the Target Rock Solenoid Valve SV-22651 shall be completed prior to November 30, 1985.

(8) Seismic and Dynamic Qualification (Section 3.10, SER, SSER # 1 SSER #3, SSER #4, SSER #5, SSER #6)

(a) Prior to exceeding 5 percent of rated power, the operating licensee~~PP&L~~ shall complete qualification and documentation, as well as installation for:

1. RCIC back power supply and inverter

2. A/E - added devices to NSSS panels

(b) "Prior to use, the operating licensee~~PP&L~~ shall complete qualification and documentation, as well as installation of the in-vessel rack."

(9) Surveillance of Control Blade (Section 4.2.3 SER)

(Deleted)

(10) Additional Instrumentation and Control Concerns (Section 7.7.2, SER, SSER #2, Section 3.11.3, SSER #6)

Prior to exceeding 5 percent of rated power, the operating licensee~~PP&L~~ shall resolve the following concerns to the NRC's satisfaction:

(a) whether common electrical power sources or sensor malfunctions may cause multiple control systems failures, and

(b) whether high energy line breaks will result in unacceptable consequential control system failures.

(11) Emergency Diesel Engine Starting Systems (Section 9.6.3, SER)

Prior to September 1, 1985, the operating licensee~~PP&L~~ shall install air dryers upstream of the air receivers.

(12) NUREG-0737 Conditions (Section 22, SER)

The operating licensee~~PP&L~~ shall complete the following conditions to the satisfaction of the NRC. These conditions reference the appropriate items in Section 22.2, "TMI Action Plan Requirements for Applicants for Operating Licenses," in the Safety Evaluation Report and Supplements 1, 2, 3, 4, 5, and 6, NUREG-0776.

(a) Nuclear Steam Supply Vendor Review of Procedures (1.C.7, SER, SSER #1)

Prior to achieving initial criticality, the operating licensee~~PP&L~~ shall assure that the General Electric review of the power ascension test procedures has been completed.

(b) Detailed Control Room Design Review (I.D.1 SSER #6)

All human engineering deficiencies requiring correction as a result of the operating licensee's~~PP&L~~ Detailed Control Room Design Review for Unit 1 shall be corrected in the Unit 2 control room. By March 1, 1985, the operating licensee~~PP&L~~ should submit its schedule for implementing all human engineering deficiency corrective action for review and approval by NRC staff.

(c) Post Accident Sampling (II.B.3, SER, SSER #1, SSER #3)

(1) Prior to exceeding 5 percent of rated power, the operating licensee~~PP&L~~ shall have installed and have operational the Post-Accident Sampling System.

(2) Prior to December 1, 1984, the operating licensee~~PP&L~~ shall revise the interim core damage estimating procedure by submitting for staff review a final procedure which incorporates hydrogen levels, reactor vessel coolant level and containment radiation levels in addition to radionuclide data.

(d) Emergency Response Capabilities (Generic Letter 82-33, Supplement 1 to NUREG-0737)

The operating licenseePP&L shall complete emergency response facilities and capabilities as required in Attachment 2 of this license.

(e) Instrumentation for Detection of Inadequate Core Cooling (II.F.2, SER, SSER #1, SSER #3, SSER #6)

The operating licenseePP&L shall implement the staff's requirements regarding upgrading of liquid level instrumentation or inclusion of additional instrumentation for detection of inadequate core cooling necessary to comply with Commission regulations, based on the staff's review of the BWR Owner's Group Reports (SLI 8211 & SLI 8218) and the operating licensee'sPP&L plant specific evaluation report addressing the recommendations of the BWROG reports. Within 90 days after the operating licenseePP&L is informed of staff requirements, the operating licenseePP&L shall submit for review and approval by the staff, a schedule for implementing any required modifications regarding upgrading of liquid level instrumentation or inclusion of additional instrumentation for detection of inadequate core cooling.

(f) Modification of Automatic Depressurization System Logic - Feasibility for Increased Diversity for Some Event Sequences (II.K.3.18, SER, SSER #1, SSER #2, SSER #3, SSER #6)

(1) Prior to achieving initial criticality, the operating licenseePP&L shall:

(i) Install modifications to the Automatic Depressurization System acceptable to the NRC, and

(ii) Propose Technical Specifications for the bypass timer setting and surveillance requirements for the bypass timer.

(2) Prior to September 1, 1985, the operating licenseePP&L shall:

(i) Incorporate into the Plant Emergency Procedures the usage of the manual inhibit switch, and

(ii) Propose Technical Specifications for the manual

inhibit switch.

(3) The operating licensee~~PP&L~~ shall maintain the manual inhibit switch disabled until license condition 2.C.(12) (f) (2) above is satisfied.

(13) Emergency Service Water System (Section 9.2.1, SSER #6)

Prior to September 1, 1985, the operating licensee~~PP&L~~ shall complete modifications to the emergency service water (ESW) system described in the operating licensee's~~PP&L~~ letter dated May 16, 1983.

(14) Control of Heavy Loads (Section 9.1.4, SSER #6)

(Deleted)

(15) Radon (ASLB Initial Decision, Paragraph 223)

This license will be subject to the ultimate outcome of the consolidated radon proceeding currently underway in Docket Nos. 50-277, 50-278, 50-320, 50-354 and 50-355.

(16) Formal Federal Emergency Management Agency Finding

In the event the NRC finds that lack of progress in completion of the procedures in Federal Emergency Management Agency final rule, 44 CFR 350, is an indication that a major substantial problem exists in achieving or maintaining an adequate state of emergency preparedness, the provisions of 10 CFR Section 50.54 (s) (2) will apply.

(17) Additional Conditions

The Additional Conditions contained in Appendix C, as revised through Amendment No. 151, are hereby incorporated into this license. ~~PP&L~~PPL Susquehanna, LLC shall operate the facility in accordance with the Additional Conditions.

D. The operating licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled:

"Susquehanna Steam Electric Station Physical Security Plan," with revisions submitted through September 24, 1987; "Susquehanna Steam Electric Station Guard Training and Qualification Plan," with revisions submitted through May 28, 1985; and "Susquehanna Steam Electric Station Safeguards Contingency Plan," with revisions submitted through September 24, 1987. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedules set forth therein.

E. Reporting to the Commission:

~~PP&L~~PPL Susquehanna, LLC shall report any violations of the requirements contained in Section 2, Items C(1), C(3) through C(16) of this license within twenty-four (24) hours. Initial notification shall be made in accordance with the provisions of 10 CFR 50.72 with written followup in accordance with the procedures described in 10 CFR 50.73 (b), (c), and (e).

F. ~~PP&L~~PPL Susquehanna, LLC shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

G. This license is effective as of the date of issuance and shall expire at midnight on March 23, 2024.

ATTACHMENT 1

1. Outstanding Items to be Accomplished Prior to Initial Criticality

   a. Complete permanent modification to correct the deficiency involving the isolation of the Nitrogen Makeup System. (Construction Deficiency Report 83-00-15)

   b. Complete system modifications to ensure electrical separation for safety-related circuits. (Construction Deficiency Report 81-00-10)

   c. Verify that waterhammer loads due to scram discharge volume vent and drain valve operation on scram reset do not affect system integrity. (Construction Deficiency Report 83-00-07)

   d. Verify that system piping, for which improper design input was included in the piping specification, are qualified for the proper design stresses. (Construction Deficiency Report 83-00-17)

   e. Verify that signal isolation devices installed in Class 1E circuits provide adequate electrical separation/isolation between Class 1E and Non1E circuits. (Construction Deficiency Report 84-00-01)

   f. Upon issue of the Operating License Technical Specifications, verify that specified conditions, setpoints, and action points in facility procedures are consistent with those Technical Specifications.

   g. Verify electrical separation criteria is met inside multiple division pull boxes and junction boxes. (Construction Deficiency Report 83-00-14)

   h. Complete modification to CRD insert/withdrawal line supports to ensure the system is qualified for design stresses. (Construction Deficiency Report 83-00-20)

2. Outstanding Items to be Completed Prior to Exceeding 5% Power

   a. Submit technical specification change requests for both units to reflect bypass leakage limits on the feedwater lines and to require pneumatic local leak rate tests. (Construction Deficiency Report 83-00-03)

   b. Verify the installation of additional post-accident monitoring instrumentation in accordance with NUREG-0737 items II.F.1.1, II.F.1.2 and II.F.1.3 and FSAR Section 18.1.30.

3. Outstanding Items to be Corrected by the First Refueling Outage

   a. Complete corrective action for deficiency involving cavitation caused by throttling valve in the RHR system. (Construction Deficiency Report 81-00-33)

   b. Complete corrective action for deficiency involving capstan springs in Pacific Scientific snubbers. (Construction Deficiency Report 83-00-18)

4. Outstanding Items to be Corrected by a Specific Date

   a. Complete correction of the remaining HED deficiencies in the Unit 2 control room documented in Inspection Report 50-388/84-08 by June 1, 1984.

   b. Complete corrective action for deficiency involving corrosion allowance for the ESW Piping to and from the RHR pump motor oil coolers by 1988. (Construction Deficiency Report 83-00-16)

   c. Submit revisions to the FSAR to correct the discrepancies noted below by July 31, 1984.

      (i) Delete reliance on the 30 day water seal on feedwater lines in Section 6.2.3 (Construction Deficiency Report 83-00-03).

      (ii) Correct statements concerning sizing of the ADS accumulators in Section 18.1.60 (TMI II.K.3.28).

      (iii) Correct information concerning containment isolation signals in Tables 18.1-10, 18.1-11, 18.1-12 and 6.2-12 (TMI II.E.4.2)

      (iv) Correct information concerning performance of the SBGTS in Section 6.2, 6.5, 9.4 and 15.6 (Construction Deficiency Report 83-00-19).

      (v) Chapter 14 must be updated to correctly reflect the Unit 2 test program (UNR 83-04-01).

   d. Verify that angle fittings used for class 1E raceway supports and seismic category I HVAC duct supports are capable of supporting their associated design loads by June 1, 1984. (Construction Deficiency Report 84-00-03)

   e. By September 1, 1984, submit to NRC Region I an acceptable long-term solution for spray pond spray network freezing. (Unresolved Item 83-32-02)

   f. Complete corrective action for deficiency involving Emergency Service Water system water hammer by September 1, 1985. (Construction Deficiency Report 82-00-06)

ATTACHMENT 2

The operating licensee~~PP&L~~ shall implement the specific items below, in the manner described in the operating licensee's~~PP&L~~ letter (PLA-1621) dated April 15, 1983, as modified by the operating licensee's~~PP&L~~ letter (PLA-1750) dated July 22, 1983, the operating licensee's~~PP&L~~ letter (PLA-1772) dated August 3, 1983, the operating licensee's~~PP&L~~ letter (PLA-1966) dated November 23, 1983, the operating licensee's~~PP&L~~ letter (PLA-2059) dated February 1, 1984, and the operating licensee's~~PP&L~~ letter (PLA-2131) dated March 14, 1984 no later than the following specified dates:

(a)	Safety Parameter Display System (SPDS)	
	SPDS full operational and operators trained	July 1, 1984
(b)	Detailed Control Room Design Review (DCRDR)	
	Submit a supplemental summary report to the NRC including a proposed schedule for Implementation.	March 1, 1985
(c)	Regulatory Guide 1.97 - Application to Emergency Response Facilities	
	(1) Submit a report to the NRC describing how the requirements of Supplement 1 to NUREG-0737 have been or will be met.	May 1984
	(2) Implement (installation or upgrade) requirements of R. G. 1.97 or provide justification acceptable to the NRC staff for suppression pool water temperature, drywell atmosphere temperature, neutron flux, primary containment isolation valve position, radiation level in circulating primary coolant, radiation exposure rate, and noble gas and vent rate.	June 1987
(d)	Upgrade Emergency Operating Procedures	
	(1) Submit a Procedures Generation Package to the NRC	June 1985
	(2) Implement the upgraded EOP's	December 1985

(e) Emergency Response Facilities

(1)	Technical Support Center fully functional	June 1987
(2)	Operational Support Center fully functional	June 1987
(3)	Emergency Operations Facility fully functional	June 1987

APPENDIX B

TO FACILITY OPERATING LICENSE NO. NPF-22

SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

~~PP&L, INC.~~PPL SUSQUEHANNA, LLC

DOCKET NOS. 50-387 AND 50-388

ENVIRONMENTAL PROTECTION PLAN

(NON-RADIOLOGICAL)

March, 1984

Amendment No. 153

Appendix C

Additional Conditions
Facility Operating License No. NPF-22
Docket No. 50-388

Amendment Number	Additional Conditions	Implementation Date
151	The operating licensee is authorized to relocate certain requirements included in Appendix A to operating licensee-controlled documents. Implementation of this amendment shall include the relocation of these requirements to the appropriate documents, as described in the operating licensee's letters dated August 1, 1996, as supplemented by letters dated November 26, 1997, January 6, March 2, April 24, and June 18, 1998, evaluated in the NRC staff's Safety Evaluation enclosed with this amendment.	This amendment is effective immediately and shall be implemented within 90 days of the date of this amendment. Dated: July 30, 1998