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SUBJECT: Forwards Amend 53 to OL application containing Revision 32 to FSAR. Rev 12/27/82 ltr

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PDS-3B Dual-Band Ground Based Electro-Optical Deep Space Tracking System PDS3B-OPS-0042
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DEC 17 1982

Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Project Management
U. S. Nuclear Regulatory Commission
Washington, DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION
AMENDMENT 53 TO OPERATING LICENSE APPLICATION
ER 100450 FILE 841-1 Docket Nos. 50-387
PLA-1434 50-388

Dear Mr. Schwencer:

Attached are sixty (60) copies of Amendment No. 53 to the operating license application. This ammendment contains Revision 32 to the Susquehanna SES Final Safety Analysis Report.

A summary of the changes made is presented below.

o	Section 2.3	Revised to correct typographical errors.
o	Section 2.4	Revised to reflect plans to use groundwater as a source of domestic water.
o	Section 2.5	Added a reference to the revised response to Question 371.30. The Question response was revised to remove piezometer number 2. The piezometers are to assure liquefaction of soil in the area of the spray pond does not occur, and piezometer number 2 is in an area where the spray pond is supported by bedrock.
o	Section 3.2	Added note 16 to Table 3.2-3 to indicate that the use of Code Case N-316 has been approved by the NRC for use in the design of small pipe at Susquehanna SES.
		Corrected Figure 3.2-2 to show proper code classification of instrument tubing.

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o	Section 3.9	Revised note (6) to Table 3.9-33 to indicate that these tests may be done during the Preoperational Test Program.
o	Section 3.10a	Updated the description of the method used to calculate shear in mounting bolts used in GE supplied cabinets in the control room. Updated Table 3.10a-3 entitled "Summary of Sample Seismic Static Analysis For Three Typical Cabinets" to reflect Section 3.10a text changes. Updated Table 3.10a-4 entitled "Seismic Design Verification Data Sheet" to reflect Section 3.10a text changes. Revised Figure 3.10a to provide a sample calculation for cabinet H12-P608.
o	Section 3.11	Revised Table 3.11-6 to correct typographical errors.
o	Section 3.13	Revised to identify the use of non-mettalic barrier materials for physical seperation where the use of 6" horizontal and vertical seperation, steel barriers, metallic enclosures or mettalic flexible conduit is not feasable. Revised Regulatory Guide 1.84 discussion to reflect the approval of ASME Code Case N-316 for use at the Susquehanna SES. Revised Regulatory Guide 1.85 discussion to reflect the approval of ASME Code Case 1481-1 for use at Susquehanna SES. Revised Table 3.13-1 to correct typographical errors.
o	Section 4.4	Revised to include Reference 4.4-33 (NEDE - 24131) and to correct typographical errors.
o	Section 6.2	Revised Subsection 6.2.1.1.3.2 to clarify that setpoints and opening times for valves are

verified by the manufacturers preoperational tests.

Revised Subsection 6.2.3.2.1 to reflect the SGTS rated capacity of 10,100 CFM.

Revised Subsection 6.2.4.3.2.10 to accurately describe the RHR Shutdown Cooling Return line penetration.

Revised Subsection 6.2.4.3.3.1 to indicate that the isolation valves for the containment purge lines fail closed on loss of electrical signal with the exception that certain valves are equiped with a manual override of the LOCA isolation signal following a specified time delay.

Revised Subsection 6.2.6.3 to correct typographical errors.

Revised Table 6.2-5 to update the accident results for containment response to recirculation line and steam line breaks. The new results do not vary substantially from past results but show that for a recirculation line break, there is a decrease in peak drywell pressure, peak drywell slab differential pressure, time of peak pressure, peak drywell temperature and time of peak suppression chamber pressure. Also the peak suppression chamber pressure increased slightly. The peak suppression chamber pressure for a steam line break was revised from 28 to 28.7 psig.

Revised Table 6.2-12 to update valve closure times for Instrument gas value SV-12651 and drywell purge valves HV-15722.

Updated Table 6.2-22 to correct typographical errors.

Updated Figure 6.2-5 entitled "Vent Flow for Recirculation Line Break." The curve was terminated at approximately 23 seconds since

		the computer program is not valid beyond that region.
o	Section 6.3	Revised to remove the commitment to provide redundent Class IE powered heat tracing for the level instrumentation on the CST. Also, the temperature of the level instrumentation, not the suction piping, is monitored by temperature instrumentation which alarms in the control room. Revised to indicate that the HPCI turbine flow controller provides a variable signal from 1 to 5 volts to the turbine govenor to maintain pump discharge flow.
o	Section 6.5	Revised minimum Standby Gas Treatment System HEPA filter efficiency requirement to 99.95 percent.
o	Section 7.1	Revised to reflect the use of non-metallic barrier material and to provide a reference to the Section 3.13 discussion of conformance with Regulatory Guide 1.75.
o	Section 7.3	Revised to clarify that the turbine govenor regulates steam flow to control HPCI turbine speed during normal operation and that manual operation of the HPCI turbine governor is possible. Updated Figure 7.3-6 entitled "Initiation Logic - HPIC, RCIC" to show RCIC initiates on receipt of low reactor water level signal.
o	Section 7.4	Updated IEEE 338-1971 discussion to state that the RCIC discharge line injects directly into the feedwater line outside containment, and is fully testable during normal operation.
o	Section 7.6	Updated recirculation pump trip logic discussion to state that both the turbine control, and turbine stop valves have a two-out-of-two once logic arrangement.
o	Section 7.7	Correct typographical errors

Corrected to state that conditions which prohibit control rod withdrawal are alarmed with the rod block annunciator.

Updated the description of the control rod display to show that accumulator trouble is indicated by a flashing red light, not an amber one, and to eliminate this blue rod scram indication.

Updated to indicate that the rod insert block from the rod worth minimizer trip affects both rod block circuits.

Updated to state that the SDV high water level comes from one of two float type level switches installed in each of two SDVs. The second float switch in each instrument valve provides a control room annunciation of increasing level below the level at which a rod block occurs.

Revised ATWS trip discussion to state that the RPT breakers will trip when reactor low water level or high vessel pressure is sensed. Also included a statement that the two MG drive motors are tripped consecutively after the RPT breakers are tripped. Added a reference to Subsection 7.6.1a.8.

Updated Subsection 7.7.1.10 discussion of refueling interlocks to state that the slack cable interlocks on the main grapple uses a pressure switch that senses pressure generated by the hydraulic load cell.

- o Section 8.1 — Revised Table 8.1-2 to identify non class IE circuits that connect to class IE power supply (ie circuits 89 and 90).

- o Section 8.3 — Updated list of alarms provided in the main control room to include an annunciation when a diesel generator fails to start.

Included a discussion in Subsection 8.3.1.4.5 of the synchronization of diesel generators following a loss, and subsequent restoration

		of offsite power; while maintaining the diesel generator in the emergency mode of operation.
		Updated fire protection discussion for cable systems.
		Revised Table 8.3-16 to reflect motor start times necessary to keep voltage and frequency changes within appropriate specifications.
o	Section 9.1	Updated and clarified the refueling equipment discussion to describe the design of the grapple used on the refueling platform.
o	Section 9.2	Clarified that the RBCCW system operates during normal operating when Reactor Building chillers are unavaiable and on loss of offsite power coincident with a LOCA.
		Revised to indicate the use of nitrites for corrosion prevention in the Reactor Building Closed Cooling Water, Turbine Building Closed Cooling Water, and Gaseous Radwaste Recombiner Closed Cooling Water Systems.
o	Section 9.5	Clarified that connections to the diesel generator fuel oil day tank, are ASME Section III, Class 3 and that the vent pipes are B31.1 and have been seismically analyzed.
		Clarified that the diesel generator starting system air receiver tanks, valves and piping from dowstream of the tee following the compressor discharge to the engine skid is designed to Seismic Catagory I requirements.
o	Section 10.2	Updated Figure 10.2-11 entitled "Bulk Hydrogen System".
o	Section 10.4	Updated the Auxiliary Steam System description to reduce the number of deaerators and boiler feed pumps and to add a description of the sodium sulfite injection system.
		Corrects typographical errors to Tables 10.4-2 and 10.4-4.

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o	Section 11.3	Updated Figure 11.3-5 entitled "Release Points Locations and Details" to show proper exhaust flow rates.
o	Section 11.4	Updated the discussion of the storage of solid radioactive wastes. Also revised to include a statement that 4 years of storage capacity will be available in the onsite Low Level Radioactive Waste Storage Facility presently under construction.
o	Section 11.5	Updated the discussion of the Standby Gas Treatment Vent Exhaust Radiation Monitoring System to indicate automatic closure of the containment purge isolation valves upon detection of high radiation in the exhaust vent during containment purge. Corrects typographical errors in the Liquid Radwaste Effluent Radiation Monitoring System. Updated the discussion of the Liquid Radwate Effluent Radiation Monitoring System to reflect a fourth trip to terminate sample flow. Updated Table 11.5-1 to correct channel ranges for Process and Effluent Radiation Monitoring Systems.
o	Section 12.3	Updated the Area Radiation Monitoring Instrumentation discussion to reflect that multipoint reorder information is stored in the computer history files and can be retrieved and printed using the PMS historical recording service program. Updated Figure 12.5-1 entitled "Health Physics Organization" to change the title of the "Health Physics Engineer" to "Radiological Support Supervisor."
o	Section 13.3	Updated Table 13.1-3 by providing current resumes for Shift Supervisors.

Updated Figure 13.1-6 entitled "Plant Staff Organization" to reflect the Health Physics staff.

- Section 14.2

Clarified that the Test Review Board Chairman reports directly to the Superintendent of Plant.

Revised Test P14.1 to reflect the as-run condition.

Incorporated Test P76.3 "Post Accident Sampling System" into the FSAR.

Corrected typographical errors.

Provided a general update of startup tests.

Provided tests A32.1, A32.3, A32.4 and A32.9 (Security System Acceptance Tests) to update the acceptnace test program.

Updated Figure 14.2-5 entitled "Individual Startup Test Sequence."

- Section 15.6

Corrected typographical errors on Table 15.6-6.

Updated Figure 15.4-6 entitled "Startup of Idle Recirculation Loop Pump" to incorporate the response to Question 211.181 into the figure.

Updated Figure 15.4-7 entitled "Recirculation Flow Control Failure with Increased Flow" to incorporate the response to Question 211.81 into the figure.

- Section 17.2

Revised the Quality Assurance Program discussion of compliance with ANSI N18.7-1976 to clarify the review frequency of certain procedures.

Revised Table 17.2-1 to clarify the complience statement with regard to ANSI N18.7-1976 and procedure review frequency.

Revised Table 17.2-1 to clarify that NFPA-232 may be used in lieu of ANSI N45.29-1974 in accordance with Regulatory Guide 1.88, Revision 2, position c.2.

o	Section 18.1	Corrected typographical errors. Updated the discussion of training for the mitigation of core damage. Updated the discussion of the integrity of systems outside containment likely to contain radioactive material, to indicate that the program has been implemented. Updated the in-plant iodine radiation monitoring program discussion to identify instruments used in this program. Revised Table 18.1-9 to reflect the course outline of training for the mitigation of core damage. Corrects typographical errors in Table 18.1-10.
o	Question 021.59	Revised to indicate that portions of the CRD system are ASME Code Class 2 and that piping integrity is demonstrated in accordance with Section XI of the ASME Boiler and Pressure Vessel Code.
o	Question 110.25	Updated the response to indicate that pipe displacements for the postulated ruptures of the recirculation system piping have been provided.
o	Question 110.29	Revised to show that Figure 3.6-14 entitled "Recirculation System Postulatad Break Locations and Restraint Locations" has been provided.
o	Question 112.5	Updated to indicate that the generic resolution to the issue of combining two or more peak dynamic loads by SRSS applies to Susquehanna SES.

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o	Question 121.14	Revised to add a reference to an additional PP&L submittal.
o	Question 121.15	Revised to add a refernece to an additional PP&L submittal.
o	Question 121.16	Revised to add a refernece to an additional PP&L submittal.
o	Question 211.21	Revised response to be consistant with ODYN analysis.
o	Question 211.43	Updated to reflect that PP&L endorses the LRG "White Paper" on CRD flow tests as described in NUREG 0619.
o	Question 211.181	Revised to correct typographical errors.
o	Question 211.192	Updated for accurancy.
o	Question 371.30	Updated to remove piezometer number 2 since the piezometers are to assure liquefaction of soil does not occur, and piezometer number 2 is located in an area where the spray pond is supported by bedrock.
o	Question 423.12	Updated to indicate that testing of the HEPA filters is complete.
o	Question 423.28	Revised Table 423.28 to correct typographical errors and to reflect the as built condition.
o	Question 423.51	Revised to properly reflect test procedures.

Very truly yours,

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