

Robert G. Byram
Senior Vice President
Generation and Chief Nuclear Officer
Tel. 610.774.7502 Fax 610.774.5019
E-mail: rgbyram@papl.com

PP&L, Inc.
Two North Ninth Street
Allentown, PA 18101-1179
Tel. 610.774.5151
<http://www.ppl-inc.com/>



OCT 27 1999

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Stop P1-137
Washington, D.C. 20555

**SUSQUEHANNA STEAM ELECTRIC STATION
FINAL SAFETY ANALYSIS REPORT REVISION 53
PLA-5062**

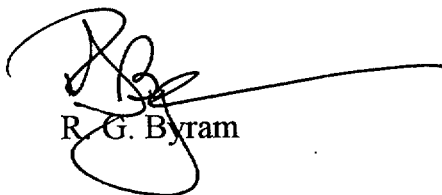
**Docket Nos. 50-387
and 50-388**

The purpose of this letter is to provide a description of Revision 53 to the Susquehanna Steam Electric Station Final Safety Analysis Report. Due to an administrative error, this letter was not issued previously with Revision 53 when transmitted in July, 1999. The changes which were made in Revision 53 are described in Attachment I hereto.

A large portion of Revision 53 was a result of a major project, begun in 1996, to evaluate and enhance the Current Licensing Basis as described in the FSAR. The amended pages were previously provided to a controlled distribution under a separate cover.

If you have any questions regarding this submittal, please contact Mr. W. W. Williams at (610) 774-7742.

Sincerely,



R. G. Byram

Attachment

copy: NRC Region I
Mr. S. L. Hansell, NRC Acting Sr. Resident Inspector
Mr. V. Nerses, NRC Sr. Project Manager

A053

Section	Question	Table	Figure	Description
8.3.2.1.1.2		8.3-7A, 7B, 7C, & 7D		Revised the Class IE 250 V DC load profiles consistent with the plant technical specifications (Amendments 162 - Unit 1 and 133 - Unit 2)
7.5, 7.7				Revised to reflect replacement of the plant computer system.
7.7.1.10.5.2, 9.1.4.2.3.9, 9.1.4.2.7.1, 7.7.1.10.3.2, 9.1.4.2.7, 9.1.4.3.7			9.1-23 Delete	Revised to reflect upgrading of the Unit 1 refueling platform.
8.3.2.1.1.3		8.3-23	8.3-6	Reflects the addition of transfer switches to provide the Unit 1 24 V DC battery chargers with an alternate Class IE power supply.
9.1.3.2				Reflects the addition of line taps to the river water makeup system for supplemental decay heat removal from the fuel pool cooling and cleanup system during refueling outages.
		7.1-3		Revises the listing of GDCs applicable to the standby liquid control system design.
7.6.2a.8.1		7.6-10		Relocates former Technical Specification Table 3.3.4.2-3 to the FSAR.
7.3.1.1a.1.5.4, 7.3.1.1a.1.5.7				Revises the core spray pump start sequencing times.
			7.4-3, 9.3-13	Reflects changes made as part of the elimination of the standby liquid control washdown berm.
			9.2-19, 9.5-28, 9.5-29	Reflects the changes to the A diesel generator fuel oil storage tank to permit water removal, oil sampling, and oil filtration.
9.5			9.5-19	Reflects changes to the B diesel generator fuel oil storage tank to permit water removal, oil sampling, and oil filtration.
			9.5-19, 9.5-28, 9.5-29	reflects changes to the C diesel generator fuel oil storage tank to permit water removal, oil sampling, and oil filtration.
9.5			9.5-19	Reflects changes to the D diesel generator fuel oil storage tank to permit water removal, oil sampling, and oil filtration.
			9.4-14	Changed to reflect the operation of the MG set ventilation system recirculation damper.
3.13.1		6.5-2		Clarifies commitments to the various revisions of Regulatory Guide 1.52 for the design, testing, and maintenance of the ESF filtration units of the standby gas treatment system.
		3.9-2n		Updates design stress information for ASME Code constructed items.
15.7.4.2.1, 15.7.4.2.2, 15.7.4.2.3, 15.7.4.2.4			15.7-1	Revised to reflect the operation of the reactor building recirculation system when SGTS operates to mitigate the consequences of a refueling accident.

Section	Question	Table	Figure	Description
3.10a.1.1, 5.4.8.2		3.9-2t		Updates design stress information for ASME Code construction items.
		6.2-22		Editorial changes to clarify the description of the operation of the RWCU system inboard and outboard suction valves and to clarify the LLRT listing for containment penetrations which contain instrument piping.
		3.9-2u		Updates design stress information for ASME Code construction items.
		3.9-2v		Updates design stress information for ASME Code construction items.
			9.4-7	Updates figures to show changes to the reactor building Zone III supply fan-monitoring instrumentation.
11.4.2.2				Reflects the removal of the mixing eductor in the waste sludge phase separator tank and replacing it with a mixing nozzle.
		3.9-2(c)		Corrects the allowable stress value for tubes in the regenerative heat exchangers.
		3.9-2aa		Editorially changed to correct errors and reflect consistent terminology.
7.0, 7.1.2.6.3, 7.3.2a.1.2.1.2		7.1-3		Changed to clarify Regulatory Guide 1.11 compliance.
		7.1-3		Removes GDC 24 as an applicable standard relative to the RWCU system.
		6.2-12		Editorially updates containment penetration data.
		3.9-20		Updates design stress information for ASME Code constructed items.
		3.9-2ab		Updates design stress information for ASME Code constructed items.
		3.9-2b, page (iii)		Updates design stress data for ASME Code constructed items.
		3.9-2ae		Updates design stress information for ASME Code constructed items.
5.4.7.1.3				Changes text to state that the RHR pressure relief valves are set to assure the maximum expected overpressure does not exceed the ASME Code allowable pressure.
		8.3-1		Changes start times for the ESW Pump House Supply Fans from 46, 46, 50 and 54 seconds to 40, 40, 44, and 48 seconds.
		3.9-2b, (ii)		Updates design stress information for ASME Code constructed items.
		3.9-2j		Updates design stress information for ASME Code constructed items.
		3.9-21		Updates design stress information for ASME Code constructed equipment.
5.4.6.2.13, 5.4.6.2.2.2, 7.4.1.1.3.6		8.3-7a		Changes made to reflect modifications made to the RCIC turbine operation relative to steam flow reduction for startup and for RCIC turbine speed control improvement using a mid-stroke time delay for the RCIC steam admission valve (FO45).
7.3.1.1a.1.6.5				Editorially changed to remove reference to a logic permitting the override of the LOCA interlock for the RHR containment spray valves that had been inadvertently left in the text after a previous modification.

Section	Question	Table	Figure	Description
9.2.5 and 9.2.7		9.2-3, 9.2-4, 9.2-5, 9.2-8, 9.2-12, 9.2-19, 9.2-20, 9.2- 21a, 9.2-23	9.2-21 and 9.2-22	Changes ESW heat loads and initial allowed ultimate heat sink temperature.
			5.4-9A	Changed to show new piping configuration.
		7.4-2		Changed to correct error. Remove reference to HV-1(2)51-F015A(B) automatic isolation on a shutdown return line excess flow signal.
3.1.2.4.12, 6.5.1.1.1, 6.5.1.1.3				Adds clarifications to the text for the SGTS design description.
		3.9-16		Revises the supplier information to account for acceptable replacements where used.
11.6				Updates the text to allow for radioactive material storage in the LLRWHF.
9.5.4.5				Provides clarifying information on the E DG fuel inlet valve.
6.2.4.1d				Corrects reference to General Design Criteria.
		3.9-16		Removes reference to deleted RHR valves.
		1.6-2		Correct the date for referenced Bechtel Topical Report BP-TOP-1.
		8.3-1, 8.3-1a, 8.3-1c, 8.3-2, 8.3-2a, 8.3-3, 8.3-3a, 8.3-4, 8.3-4a, 8.3-5, 8.3-5a		Revised to reflect removal of the Unit 2 MSIV-LCS.
7.3.2a.4.3.1.9				Changes the description of the capability to perform sensor checks for the different modes of RHR.
			10.4-6-1	Revises figure to show line 3" GBD-147 being capped and abandoned in place.
			10.4-9	Revises figure to show Line 3" GBD-147 being capped and abandoned and portions of GBD-125 being removed.
7.3.2a.5.2.4, 7.3.2a.5.2.5, 7.3.2a.5.2.8, 7.3.2a.5.2.9 and 7.3.2a.5.4.5				Correction of typographical errors.
		7.4-3		Removes reference to HSS-15111A, RHR HX outlet and bypass, shutdown cooling injection and suppression pool cooling return from the table.

Section	Question	Table	Figure	Description
5.2.2.1, 5.2.2.2, 5.2.2.3, 5.2.6		5.2-2, 5.2-9	5.2-1, 5.2-13, 5.2-14	Revised to reflect the results of the SSES Overpressure Protection Analysis.
4.1		4.1-1, 4.1-2, 4.1-3, 4.1-4, 4.1-5, 4.1-6, 4.1-7, 4.1-8.		Updates the description of the computer codes used in the SSES reactor analysis. Revises the description of the reactor components and adds the description of ATRIUM 10 fuel.
4.2				Revised to add the fuel system design bases, design description, design evaluation and inspection program for ATRIUM 10 fuel.
	423.5			Editorial change to procedure reference.
6.2.6.3		6.2-12, 6.2-22	6.2-44F & 5.4-9A	Changed to reflect LLRT enhancement of RCIC penetration X-245.
6.2.6.3		6.2-12 and 6.2-22	6.2-44F and 6.3-1A	Changed to reflect LLRT enhancement of HPCI Penetration X-244.
		7.4-3 and 8.1-1		Revised to reflect removal of the RHR steam-condensing mode of operation.
		7.4-3		Editorially changed to correct typographical errors and restore information erroneously removed in a previous revision.
7.3.1.1a.2.4.1.1.1 and 7.3.1.1a.2.4.1.6.1				Removes reference to the RHR drain to the suppression pool.
7.6.1a.4.3.5				Changes were made to create consistency between the revised section and the rest of the FSAR and the plant technical specifications.
		7.3-5		Corrects the table to reflect the correct range of the RHR water line high flow isolation functions.
1.2.2.8.3, 2.4.11.5, 9.2.5.1, 9.2.5.2, 9.2.5.3, 9.2.5.5		3.2-1		Editorial changes to clarify text and correct typographical errors.
9.4.2.1.1.e, 9.4.2.2.1.a, 9.4.2.1.1.d			3.11-4, 3.11-5, 3.11-6, 3.11-7, 3.11-	Editorially changed to deleting temperature data from text and referencing FSAR figures, which contain the data.
9.2.12.3.2.3				Changed to delete reference to a 100% redundancy in the drywell cooling capacity.
		8.3-1, 8.3-1a, 8.3-1c, 8.3-2, 8.3-2a, 8.3-3, 8.3-3a, 8.3-4, 8.3-4a, 8.3-5 and 8.3-5a.		Revises the table to incorporate equipment load demand changes.

Section	Question	Table	Figure	Description
(5.4)		5.4-4	5.4-2A, 5.4.2B-1, 5.4.2D	Changed figure to reflect cutting and capping of SPDCA251-2.
15.6				Changed editorially to provide clarification and to provide technical corrections to the analysis and results for postulated events, which result in a decrease in reactor coolant inventory.
15.7.4				Revised to reflect the current analysis basis and results for the refueling and equipment handling accidents.
6.3.3				Revised to reflect the current analysis basis and results for the ECCS Performance Evaluation (LOCA Analysis) for Atrium-10 Fuel.
4.4				Revised to reflect the current analysis basis and results for the thermal hydraulic design of the Unit 1 and 2 reactors (including updates for SPC 9x9-2 and Atrium-10 fuels).
9.4.2.1.1.a				Removes excess detail from the text.
9.5.8.2			9.5-25	Deletes unnecessary figures and the references thereto.
3.8.1.1.1, 3.8.3.1, 6.2.1.1.2, Appendix 6A			3.8-3, 3.8-4, 3.8-5, 3.8-6, 3.8-7 and 3.8-8	Deletes unnecessary figures and the references thereto.
			3.5-6	Updates figure.
			9.5-23	Editorial change to correct figure reference.
			2.4-52	Removed extraneous information from the figure.
			021.74-1 through 021.74-27	Revises figures to denote them as historical information only.
9.4.2.1.1.e				Editorial change to provide consistency with the plant technical specifications.
3.1.2.4.12, 6.2.3	021.32, 021.54, 021.55 and 021.87	6.2-15 and 6.2-15a	6.2-66E	Revised to reflect the current licensing basis for the secondary containment bypass leakage.
6.5.1.1.5				Revised to provide clarification of which SGTS operating conditions that are alarmed in the control room.
		8.3-1b		Revised to reflect changes to the setpoints for the C and D RHR pump time delay timers.

Section	Question	Table	Figure	Description
3.13.1 Reg. Guide 1.30, 7.6.1a.5.4, 7.6.2a.5.3.1, 5.3.2, 7.6.2a.5.4.2, 7.7.1.13.1.1 subsection 4, 8.3.2.1.1.3				Editorial changes to correct cross-references.
		5.2-11		Updates references and figures to current drawing revisions.
11.1, 11.1.4.2 and 11.1.4.3				Revised to reflect impact of 24-month cycle with the use of Atrium-10 fuel.
			9.2-3	Updates figure with the latest revision of the controlled drawing.
1.2.2.8.5, 9.2.3.2, 9.2.3.5				Revised to update the description of the turbine building closed cooling water system.
15.7.2 and 15.7.3		15.7-9, 15.7- 10, 15.7-11		Revised to reflect changes in the design and operation of the liquid and solid waste management systems.
2.4.12, 2.4.12.3, 2.4.13.2.3.2 and 2.4.13.3		2.4-20, 2.4-35, 2.4-36, 2.4-37, 2.4-38	12.2-32 and 12.2- 55	Revised to reflect the discontinued use of the radwaste evaporator.
17.2.1.20				Updates the duties and reporting chain of the Manager-Independent Safety Engineering.
		3.9-2m		Revises design stress and acceleration data for ASME Code constructed items.
1.6.4		1.6-3 and 1.6-4		Revised to remove duplicate and outdated core reload design references.
1.2.2.3.1, 3.1.2.4.6, 3.9.1.4.10, 3.9.2.2a.2.5, 3.9.7				Revised to reflect the current core designs as defined by the Unit 1 Cycle 10 Core Operating Limits Report and the Unit 2 Cycle 9 Core Operating Limits Report.
3.1.2.6.3, 9.1.1.1.1.2, 9.1.1.3.1, 9.1.2.1.1.2, 9.1.2.3.1, 9.1.2.3.2, 9.16.3.1.2.6.3				Updated the description of the new and spent fuel storage criticality design bases and evaluation sections to address the storage of ATRIUM-10 fuel and Lead Use Assemblies.
		7.1-3		Updates the compliance matrix for the neutron monitoring system.
			12.3-18 and 12.3- 20	Updates figures to reflect the installation of locked personnel access control gates in the Unit 1 drywell at elevations 715' 1-3/4" and 757' 2".
			5.4-16-1	Updates figure with latest controlled drawing.

Section	Question	Table	Figure	Description
3.13.1				Revised to reflect the guidance of Generic Letter 97-02.
13.4 and 17.2				Revised to reflect conversion from Current Technical Specifications to Improved Technical Specifications (Current Technical Specifications requirements moved to the FSAR).
			5.3-1	Editorially changed the figure to remove extraneous information.
5.4.1.3, 5.4.3			5.4-2A and 5.4-2D	Figures deleted to remove redundant information.
			11.6-3 and 11.6-4	Deleted extraneous information by revising Figure 11.6-3 and deleting Figure 11.6-4.
9.2.7.3.2			9.2-24-1, 9.2-24-2, 9.2-24-3.	Figures were revised to remove extraneous information.
			9.5-26, 9.5-26A and 9.5-27	Figures revised to remove extraneous information.
13.5.1.1, 13.5.1.3, 13.5.2.2.4, 13.5.2.2.12				Revised to account for Regulatory Guide 1.33, Rev. 2 and to account for the location of surveillance requirements in both the Improved Technical Specifications and the Technical Requirements Manual.
3.13.1, 6.2.4, 6.2.6, 18.1.29.3	021.45, 021.49, 021.62, 021.66 and 021.84	5.4-4, 6.2-12, 6.2-12a, 6.2-21, 6.2-22, 18.1-10	6.2-44, 6.2-44A, B, C, D, E, F, H, J, K, & L	Revises the FSAR to reflect the current licensing basis for containment isolation and testing.
3.13, Reg. Guide 1.52				Revised to indicate exceptions taken to the Lab Testing Criteria as stated by reference Regulatory guide 1.52. This change is supported by a previously approved technical specification change.
			9.1-11, 9.1-12, 9.1-13, and 9.1-23	Revised figures to remove extraneous information.
			9.3-4	Updated figures to show current plant configuration.
3.8.4.1			3.8-69, 73.8-70, 3.8-71, 3.8-74, 3.8-75, 3.8-76, 3.8-77, 3.8-78	Updated figures and figure references.
			10.4-6-2	Revised figure to show pipe class change reflecting changes due to erosion/corrosion program.
			5.1-3A-1	Revised figure to reflect changes due to the erosion/corrosion program.
			10.4-4-1	Revised figure to reflect changes due to erosion/corrosion program.
1.2.2.8.1				Changed to reflect current biological control program for cooling tower.
9.2.1.5				Revised to reflect removal of the service water pump trip interlock on low seal water pressure.
13.1.3.1				Superseded by LDCN 2766

Section	Question	Table	Figure	Description
5.1				Editorially changed to correct the description of the RWCU filter demineralizers.
			6.7-1, 6.7-2, 6.7-3-1, 6.7-3-2, 6.7-3-3, 6.7-3-4, 6.7-4, and 6.7-5	Deletes figures depicting the MSIV Leakage Control System.
			7.7-3-2	Editorial correction of drawing references.
			10.2-5	Updated figure to current plant configuration.
			9.4-17	Editorial change to figure.
			1.8-1, 1.8-2, 1.8-3	Editorial changes to figures.
10.4.6		10.4-2, 10.4-3, 10.4-4 and 10.4-5	10.4-2 (10.4-2-1, 10.4-3 (10.4-2-2), 10.4-2-3	Change the description of the Condensate Cleanup System to reflect the as-built conditions.
9.3.1.2.2.1			9.3-2 and 9.3-3	Editorially changed the description of the Service Air Systems.
7.2.2.1.2.3.1.2			7.2-1, 7.7-2-1, 7.7-2-2, 7.7-2-3, 7.7-2-4, 7.7-2-5, 7.7-2-6, and 7.7-2-7	Changed to revise the description of the Scram Pilot Solenoid Valves.
7.5.1a.1				Editorially change the description of the NSSS Safety Related Display Instrumentation.
8.3.2.1.1.6		8.3-6J and 8.3-7E (new)		Added references to indicate the location of the 125 and 250 V DC station battery load profiles.
			9.2-1A, 9.2-1A-1, New: 9.2-1A-2, 9.2-1A-3	Updates Figure 9.2-1A and adds other figures to supplement the description of the Service Water System.
		3.2-1		Editorial change to clarify description of the Service Water System piping.
9.2.1.2				Revised to clarify the Service Water System heat loads and piping design pressures.
6.2.4.3.2.11		6.2-12		Revised to relocate the discussion of TIP Guide Tube Containment isolation under the discussion of GDC 56. Table 6.2-12 was also revised to reference the discussion's change of location.
3.13.1				Editorially changed to correct grammar and reference.
3.2.2.1		3.2-1		Editorially changed to clarify seismic requirements for the Gaseous Radwaste System.
7.5			7.5-1 and 7.5-2(all)	Changed to remove duplication in the description of the plant computer system.
		3.2-1		Revised to eliminate discrepancies within the table.
9.2.1.2				Revised to clarify operation of the Service Water System.

Section	Question	Table	Figure	Description
			7.3-8-1, 7.3-8-2, 7.3-8-3, 7.3-8-4, 7.3-8-5, 7.3-8-6	Figures updated to current plant configuration.
9.3.1.5.1, 9.3.1.5.2, 9.3.1.5.3, 9.3.1.5.5		3.2-1 and 9.3-8		Editorial changes to the description of the CIG System.
3.12.3.4.2 and 8.1.6.1t				Adds exception for the installation of temporary cables with no minimum separation distance from totally enclosed Class IE as allowed by EDS-05.
			11.2-1, 11.2-2, 11.2-3, 11.2-4, 11.2-5, 11.2-6, 11.2-7, 11.2-8, 11.2-9, 11.2-10, 11.2-11, 11.2-12, 11.2-13, 11.3-1, 11.3-2A, 11.3-2B, 11.3-2C, 11.3-2D, 11.3-3, 11.3-6, 11.4-1-1, 11.4-2-4, 11.4-3, 11.2-5-3, 11.2-6-2, 11.2-6-3, 11.3-4-2, 11.3-5-2, 11.4-1-2.	Revises figures to reflect design and operational changes to the Liquid, Gaseous, and Solid Radwaste Management Systems.
8.1.2, 8.1.3, 8.1.4, 8.1.5			8.3-1-2, 8.3-1-3 (new), 8.3-4A (not deleted)	Revised to provide consistency in terminology used in the FSAR text and drawing and the terminology used by transmission operators and Susquehanna system operators.
16.3 (New Section)				Adds Section 16.3, "Technical Requirements Manual".
			7.4-3 and 9.3-13	Updates figures to current plant configuration.
			7.4-3 and 9.3-13	Updates figures to current plant configuration.
7.3.1.1a.1.5.4				Revised to clarify the description of the core spray initiation signals and to add consistency with other portions of the FSAR text.
9.4.1.1.7				Revised to reflect the configuration of the Control Structure Removal Exhaust System.
6.4 and 9.4				Revised to exclude the containment ILRT equipment and the deaerator seal water cooler from the need for pressure and temperature measurement on the inlet and outlet of the service water heat exchanger.
			9.5-30a, 9.5-41a, 9.5-42a, 9.5-42b	Updates figures to show the current plant configuration.

Section	Question	Table	Figure	Description
			5.4-2B-1 and 4.4-2B-2	Figures revised to reflect replacement of temperature element.
11.4 and 9.1.3		11.4-1, 11.4-2, 11.4-3, 11.4-4, 11.4-5, 11.4-6, 11.4-7, 11.4-8, 11.4-9, 11.4-10,		Revised to reflect changes to the Solid Radwaste Management System.
		7.1-3		Revised to clarify compliance of RPT function to IEEE 308-1974 and R. G. 1.32-1972.
			10.2-8 and 10.2-9	Figures were deleted in response to the electrical disconnection of the turbine-generator load following capability.
7.2.1.1.4.4.2				Revised to relocate the turbine stop valve closure bypass and turbine control valve fast closure bypass trip setpoint allowable value information from the technical specification to the FSAR.
12.2		12.2-6 to 12.2-8, 12.2-11 to 19, 12.2-21 to 28, 12.2-30 to 38, 12.2-40 to 45	N/A	Revised to reflect updating of radiation source information.
			9.5-44, 9.5-45, 9.5-46	Figures deleted - extraneous information.
			2.4-54a	Figures deleted - extraneous information.
9.3.1.2.2.1			9.3-3a and 9.3-3b	Figures 9.3-3a and b were replaced with figures based on controlled drawings.
9.2.12.2.2.3 and 9.2.12.3.2.3				Revised to update the description of the chilled water system.
		3.2-1		Editorially changed to clarify the description of the Chilled Water System.
			9.3-12 and 9.3-12A	Revised to reflect the removal of the yard area sump heaters.
9.3.1.4.2, 9.3.1.4.3, and 9.3.1.4.5		9.3-6 and 3.2-1		Revised to update the description of the river intake structure compressed air system.
		5.2-1		Revised to incorporate code cases not previously identified in the FSAR.
7.5.2a.1.1.2.1				Revised to allow the use of analysis as an alternative to installing isolation devices per the requirements of IEEE 279-1971.

Section	Question	Table	Figure	Description
			7.3-7-2, 7.4-4, 7.7-11, 7.7-12, 7.7-7-2	Revised figures to reflect current plant configuration.
6.3.6			6.3-120 and 6.3-12-1	Corrects text to add test procedure references and remove references to FSAR figures.
			1.2-2, 1.2-18, 1.2-20, 1.2-21, 1.2-28, 1.2-30, 1.2-31, 1.2-39	Updates figures to reflect current plant configuration.
4.6.2.1.2.2.3				Revised to reflect use of new CRD cap screws and washers.
9.2.10.2		9.2-13		Editorial changes to correct references and to add information to enhance information provided by the table.
9.1.1		3.2-1	9.1-20	Revised to clarify the description of the new fuel storage vault.
8.3.2.1.1.8				Revised to change the discharge rate for the Unit 2 battery from 266 amps to 289 amps for 2.5 hours.
			021.74-26, 032.16-1 through 032.16-29	Adds note to drawings for the designation of historical based information.
4.1.2.2 and 4.1.2.4				Editorial changes.
9.5.2				Editorial changes.
		6.2-12 Notes		Revises the reactor water isolation signal for the main steam isolation valves and the main steam line drain valves.
			12.3-8, 12.3-19, 12.3-22	Updates figures to reflect the current plant configuration.
			7.4-2-2 and 7.4-2-3	Updates figures to reflect the current configuration of the plant.
9.4.6			9.4-17	Revised to reflect changes to the actuation damper assemblies so that they can be locked in their normal design operating position.
9.4.9				Revised to reflect current operating practices.
9.5.3		9.5-1, -2, -3	9.5-47	Editorial changes.
10.2.2			10.2-8, 10.2-9, 10.2-10	Adds a listing of turbine trips and makes other editorial changes.
10.2.3				Editorial changes to describe intended inspections whenever turbine buckets are removed.
5.4.7.1.5				Editorial change to clarify that plant procedures direct the operator to use alternate shutdown cooling in the event either of the two RHR shutdown supply valves fails to operate.

Section	Question	Table	Figure	Description
3.6.1.2.1, 3.9.1.2.4.3, 5.4.7.2.1				Editorial changes.
3.6, 3.0		3.6-1, 3.6-1a, 3.6-2, 3.6-3, 3.6-13	3.6-1A, 3.6-1B, 3.6-1C, 3.6-1D, 3.6-2, 3.6-3, 3.6-4, 3.6-5, 3.6-6, 3.6-7, 3.6-8, 3.6-8A.1, 3.6-8A.2, 3.6- 8A.3, 3.6-8A.4, 3.6-8A.5, 3.6-8B, 3.6-8C, 3.6-8D, 3.6-8E, 3.6-17-1, 3.6-17-2, 3.6-17-3	Editorial changes to clarify and correct minor discrepancies.
3.13				Revised the statement of compliance for RG 1.52, Rev. 2, Position C.5.
			7.3-10-1 through 7.3-10-5	Updates figures to reflect current plant configuration.
			10.4-7 and 10.4-8	Updates figures to reflect current plant configuration.
			10.4-1-1 through 10.4-1-3	Updates figures to current plant configuration.
1.8.2, 1.8.5.1			1.8-2a, 1.8-2b and 1.8-2d	Updates figures to current plant configuration and corrects reference thereto.
			3.8-19-1, 3.8-19-2 and 3.8-23	Updates figures to current plant configuration.
			10.4-9	Updates figure to current plant configuration.
			3.8-53 and 3.8-54	Updates figures to current plant configuration.
			10.4-5	Updates figure to current plant configuration.
			3.8-19-3	Updates figure to current plant configuration.
			2.4-54	Updates figure to current plant configuration.
7.1.2.5.1				Revises text to indicate that the manual capability of the Bypass Indication System may be used to augment administrative controls.
		9.3-10		Revised usage factors to reflect current plant practices.
6.6				Revises the text to clarify requirements and add descriptive text for the ISI program.
5.4.9 and 5.4.14				Editorial changes.
5.4.7.2.2.a				Editorial changes.
		7.5-1, 7.1-3, 7.3-27		Revised to reflect the deletion of the MSIV Leakage Control System.

Section	Question	Table	Figure	Description
			9.5-16A and 9.5-42	Updates figures to current plant configuration.
			9.4-4 and 9.4-12	Updates figures to current plant configuration.
			6.3-1A, 6.3-1B and 6.3-4	Updates figures to current plant configuration.
			6.2-67	Updates figure to current plant configuration.
			8.3-5	Updates figure to current plant configuration.
			8.3-1-1	Updates figure to current plant configuration.
5.4.7.2.2b and 5.4.7.2.2c				Editorial changes.
9.1.2.1.1.1A, 9.1.2.1.3.9.1.2.2, 9.1.2.3.2, 9.1.2.3.3.1, 9.1.6, 9.0		9.1-3, 9.1-7a and 3.2-1		Editorial changes to provide clarification, correct minor discrepancies, and maintain consistency within the document.
3.13.1				Revised to update and clarify commitment to RG 1.129.
		6.1-1a		Revised to update pressure retaining parts materials for RHR, CS, and HPCI pumps.
6.1		6.1-1a		Revised to update Main Steam Safety Relief Valve pressure retaining parts materials
6.1		6.1-1a		Revised materials for the MSIV stems, bolts (studs) and nuts.
			9.3-13	Updates figure to current plant configuration.
			5.1-3B	Updates figure to current plant configuration.
			9.5-22A	Updates figure to current plant configuration.
			9.4-4A, 9.4-7, 9.4-8, 9.4-9	Updates figures to current plant configuration.
			12.3-30-1 and 12.3-30-2	Updates figures to current plant configuration.
			5.4-9B, 5.4-16-2, 5.4-16-3 and 5.4-18	Updates figures to current plant configuration.
			6.2-55A, 6.2-55B & 6.2-55C	Updates figures to current plant configuration.
			9.3-1	Updates figure to current plant configuration.
			9.4-1, 9.4-2, and 9.4-3	Updates figures to current plant configuration.
			8.3-15	Updates figure to current configuration of the plant.

Section	Question	Table	Figure	Description
			9.4-1, 9.4-2 and 9.4-3	Figures have been revised to current plant configuration.
			8.3-2, 8.3-3 and 8.3-4	Updates figures to the current configuration of the plant.
			7.4-3	Updates figure to the current configuration of the plant.
			3.8-72	Updates figure to the current configuration of the plant.
			8.3-5A	Updates figure to the current configuration of the plant.
			9.5-28, 9.5-29, 9.5-30, 9.5-39 and 9.5-43-1	Updates figures to the current plant configuration.
7.5.1a, 7.5.1a.1 and 7.5.1a.4.2.3.1				Editorial changes to clarify identification of SRDI and non-SRDI.
			9.3-6 through 9.3-9 and 9.3-9A	Revises figures to current plant configuration. Also, updates text references to reflect figure changes.
18.1.30.3.1			9.3-9A	Editorial change to correct panel designation.
			9.3-9A	Updates figure to current plant configuration.
			9.5-20 and 9.5-20A	Updates figures to current plant configuration.
			9.4-10	Updates figure to current plant configuration.
			9.3-1-1, 9.3-5-2, and 9.3-11	Updates figures to current plant configuration.
			9.2-2, 9.2-5A and 9.2-5B	Updates figures to current plant configuration.
7.4.1.1.3.1, 7.4.1.4.1, 7.4.2.1.2.1.10, 7.4.2.2.2.1.10 and 7.4.2.2.2.3.1.9		2693		Editorial changes to correct typographical errors and references.
3.10a.2.3		7.1-3		Editorial changes to provide consistency within the text for references to IEEE 382 and various GDCs associated with the recirculation pump trip function.
		3.5-7	3.5-7	Updates figure to current plant configuration.
			6.4-1a, 6.4-1b, 6.4-1c, 6.4-1d 6.4-1e	Updates figures to current plant configuration.
			9.2-8 to 9.2-8-1, add 9.2-8-2 and 9.2-8-3	Updates figures to current plant configuration.

Section	Question	Table	Figure	Description
			9.2-7A and 9.2-7B add: 9.2-7-1, 9.2-7-2, 9.2-7-3 and 9.2-7-4	Updates figures to current plant configuration.
			9.2-14, 9.2-14-1, 9.2-14-2, 9.2-14-3, 9.2-14-4	Updates figures to current plant configuration.
9.2.10				Revised to add clarifications, correct references, correct omission, and establish consistency within the text.
2.3.3.1, 2.3.3.3, and 2.3.3.4		2.3-73	9.2-9 2.3-5	Updates figure to current plant configuration. Editorial changes to the description of the meteorological tower. Correction of typographical errors. Updating of the sections for consistency.
3.9.3.4.1		3.2-1		Revised to provide cross reference information and to add clarification
			10.2-7 and 10.2-10	Figures have been deleted to reflect disconnection of the turbine generator load following capability.
5.4.12				Editorial changes to add clarification, correct typographical errors and update the text to reflect the current plant configuration.
18.1.29.3		3.9-13, 6.2-12, 6.2-22, 18.1-10, 18.1-11		Revised to designate RWCU valves 141F039A and B and Feedwater valves 141818A and B as containment isolation valves.
9.3.2.3.1				Revised to indicate that there is no flexible connection installed between the nonsafety related Unit 1 reactor building sample station and safety related ductwork.
9.3.2.1.2				Revised to clarify the operational capabilities of the water chemistry data acquisition system.
18.1.1.3, 18.1.3.3, 18.1.21.3.4.2.3d, 18.1.29.3(1), 18.1.69.3 4A		18.1-17		Revised to reflect the transition to Improved Technical Specifications.
7.2.1.1.4.4		7.3-6		Revised to add information about the RPS shorting links.
5.1, 5.1.2, 5.1.3		5.1-1	1.2-49 and 1.2-49-1	Revised to remove information duplicated else where in the FSAR. Revised editorially to add clarification and provided consistency.
9.2.8				Revised to identify correct clarifier effluent quality requirements, correct text references, describe well water as the normal source of clarified water, revise operating flow rates, discuss biocide injection, and clarify text.
9.4.5.2				Revised to correct figure references.
			9.5-21 and 9.5-22	Revised figures to current plant configuration.

Section	Question	Table	Figure	Description
9.2.4.1, 9.4.2.1.1, 9.4.2.1.2, 9.4.2.2.2			9.4-4, 4-4a, 9.4-5, 9.4-6, 9.4-13, 9.4.4b, 9.4-5b, 9.4-5c, 9.4-6b, 9.4-13b	Revised to updates figures to current plant configuration and correct references thereto.
9.5.5				Revised to address minor discrepancies in the description of the Diesel Generator Cooling Water System.
9.2.4.2				Editorial changes revising the heat capacity of the GRRCCW heat exchanger and to correct grammar.
6.3.6				Revised to reflect the replacement of the RHR and Core Spray Suction Strainers in the suppression pool.
6.3.5				Revised to clarify CS and LPCI initiation and to revise the upper limit of reactor pressure for injection of HPCI.
7.6.1a.5.6		7.6-5		Revised to add the allowable range of values for the APRM simulated thermal power time constant.
6.4.6(b)				Revised to relocate CTS Table 3.3.7.1-1 to the FSAR as part of implementing Improved Technical Specifications.
3.9.1.1.7				Revised to relocate CTS Table 5.7.1-1 to The FSAR as part of the implementation of Improved Technical Specifications.
10.4.4				Revised to relocate CTS Table 4.7.8b.2 to the FSAR as part of the implementation Of Improved Technical Specifications.
17.2				Revised to denote generic titles previously used in CTS to support implementation of Improved Technical Specifications.
			9.2-11 to 9.2-11-1, add 9.2-11-2	Updates figures to current plant configuration. Also updates references to figures.
			9.2-11 and 9.4-9	Revised figures to shows changes to the standby gas treatment system demister loop seal drain piping.
			10.4-3	Revised to reflect the elimination of the resin overflow and low resin level trip functions of URC 1/2T172.
			10.4-3	Revised figure to reflect elimination of the resin overflow and low level trip functions of URC 1/2T172.
9.2.12.3.2.3, 9.2.12.3.5, 9.4.2.1.2, 9.4.2.1.5			9.2-13A	Revised to reflect currently acceptable suppliers for replacement parts. Revised to reflect elimination of the automatic and remote operation drain function of the Unit 1/Unit 2 Zone I and Zone II cooling coils. Also, revised to reflect elimination of the remote drain function of the Unit 1/Unit 2 Zone III cooling coils.

Section	Question	Table	Figure	Description
5.2.2.1.4, 7.1.2.6.20, 18.1.71.1.2				Editorial changes to references.
9.1.2.1.3				Revised to reflect new storage limits for control blades.
1.4				Revised to designate text as historical.
1.5				Revised to designate text as historical.
1.2.2.8.2				Revised to remove reference to laying up RHR Heat Exchanger with demineralized water after use.
		3.2-1		Revised to change the principle construction code for the heat exchangers in RHRSW. Also editorial changes to add clarification.
18.1.69				Revised description of the containment air monitors and their testing.
4.3		4.3-1 thru 4.3-6	4.3-1 thru 4.3-30 18.1-1 thru 18.1-8	Revised to reflect reload nuclear design.
13.1				Revised to update figures.
17.2		17.2-1		Rewritten to reflect current organization.
9.3.1.3				Revises Quality Assurance program description.
12.1				Revised to more accurately identify current demands for LP Compressed Air System.
11.2		11.2-1, 11.2-2, 11.2-4, 11.2-5, 11.2-6, 11.2-7, 11.2-8, 11.2-9, 11.2-10, 11.2-11, 11.2-12, 11.2-13, 11.2-14, 11.2-15, 11.2-16		Revised to reflect organizational changes.
9.2.1.5				Rewritten to describe current Liquid Waste Management System.
				Revised to exclude condensate ILRT equipment and Deaerator Seal Water Cooler from need for pressure and temperature monitoring on the inlet and outlet.

Section	Question	Table	Figure	Description
2.1-1, 2.5-27, 2.5-28, 3.8-12, 3.5-6, 1.2-8, 1.2-16, 1.2-37, 1.2-38, 1.2-39, 1.2-40, 1.2-41, 1.2-42, 1.2-43, 1.2-48, 1.2-50, 1.2-51, 5.4-15a, 5.4-15b, 6.4-1c, 7.4-3, 1.2-1, 1.2-9, 11.6-2, 2.4-54, 3.5-8			2.3-3, 3.7b-2, 3.7b-1, 3.8-13, 3.8-75, 3.8-79, 3.8-80, 3.8-81, 8.3-10, 3.8-82, 8.3-10a, 3.8-90, 11.2-1, 3.8-91, 11.2-2, 3.8-92, 11.2-3, 3.8-93, 11.2-4, 3.8-94, 11.2-5, 3.8-85, 3.8-83, 8.3-10b, 3.8-84, 5.4-17a, 5.4-17b, 7.7-13, 9.3-13, 11.2-6, 11.2-7, 12.3-28, 18.1-3, 18.1-1	Revised to delete duplicate figures.
11.4.2.3		11.4-3	11.4-3	Revised to reflect elimination of dry active waste shredder/compactor.
10.4.6.2, 10.4.6.2.2, 12.3.1.4			10.4-2 and 10.4-3	Revised to update figures and references.
1.1.1, 1.4.1, 11.6.12, 17.2.0				Administratively changed to reflect new corporate name.
15.0, 15.1, 15C, 15D, 15E, 15.2, 15.3, 15.4, 15.5				Rewritten to reflect reload under design.