

MANUAL HARD COPY DISTRIBUTION  
DOCUMENT TRANSMITTAL 2012-2351

---

USER INFORMATION:

GERLACH\*ROSE M                    EMPL#: 028401    CA#: 0363

Address: NUCSA2

Phone#: 254-3194

TRANSMITTAL INFORMATION:

TO:        GERLACH\*ROSE M            01/16/2012

LOCATION:   NRC REGION 1 TECH SPECS

FROM:      NUCLEAR RECORDS DOCUMENT CONTROL CENTER (NUCSA-2)

THE FOLLOWING CHANGES HAVE OCCURRED TO THE HARDCOPY OR ELECTRONIC MANUAL ASSIGNED TO YOU. HARDCOPY USERS MUST ENSURE THE DOCUMENTS PROVIDED MATCH THE INFORMATION ON THIS TRANSMITTAL. WHEN REPLACING THIS MATERIAL IN YOUR HARDCOPY MANUAL, ENSURE THE UPDATE DOCUMENT ID IS THE SAME DOCUMENT ID YOU'RE REMOVING FROM YOUR MANUAL. TOOLS FROM THE HUMAN PERFORMANCE TOOL BAG SHOULD BE UTILIZED TO ELIMINATE THE CHANCE OF ERRORS.

ATTENTION: "REPLACE" directions do not affect the Table of Contents, Therefore no TOC will be issued with the updated material.

TSB2 - TECHNICAL SPECIFICATIONS BASES UNIT 2 MANUAL

REMOVE MANUAL TABLE OF CONTENTS    DATE: 11/30/2011

ADD        MANUAL TABLE OF CONTENTS    DATE: 01/13/2012

CATEGORY: DOCUMENTS    TYPE: TSB2

*ADD  
NRR*

ID: TEXT 3.4.3  
REMOVE: REV:2

ADD: REV: 3

CATEGORY: DOCUMENTS TYPE: TSB2  
ID: TEXT LOES  
REMOVE: REV:104

ADD: REV: 105

ANY DISCREPANCIES WITH THE MATERIAL PROVIDED, CONTACT DCS @ X3107 OR X3136 FOR ASSISTANCE. UPDATES FOR HARDCOPY MANUALS WILL BE DISTRIBUTED WITHIN 3 DAYS IN ACCORDANCE WITH DEPARTMENT PROCEDURES. PLEASE MAKE ALL CHANGES AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX UPON COMPLETION OF UPDATES. FOR ELECTRONIC MANUAL USERS, ELECTRONICALLY REVIEW THE APPROPRIATE DOCUMENTS AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX.

# SSES MANUAL

Manual Name: TSB2

Manual Title: TECHNICAL SPECIFICATIONS BASES UNIT 2 MANUAL

## Table Of Contents

Issue Date: 01/13/2012

<u>Procedure Name</u>	<u>Rev</u>	<u>Issue Date</u>	<u>Change ID</u>	<u>Change Number</u>
TEXT LOES <b>Title:</b> LIST OF EFFECTIVE SECTIONS	105	01/13/2012		
TEXT TOC <b>Title:</b> TABLE OF CONTENTS	18	09/01/2010		
TEXT 2.1.1 <b>Title:</b> SAFETY LIMITS (SLS) REACTOR CORE SLS	4	05/06/2009		
TEXT 2.1.2 <b>Title:</b> SAFETY LIMITS (SLS) REACTOR COOLANT SYSTEM (RCS) PRESSURE SL	1	10/04/2007		
TEXT 3.0 <b>Title:</b> LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY	3	08/20/2009		
TEXT 3.1.1 <b>Title:</b> REACTIVITY CONTROL SYSTEMS SHUTDOWN MARGIN (SDM)	1	03/24/2005		
TEXT 3.1.2 <b>Title:</b> REACTIVITY CONTROL SYSTEMS REACTIVITY ANOMALIES	0	11/18/2002		
TEXT 3.1.3 <b>Title:</b> REACTIVITY CONTROL SYSTEMS CONTROL ROD OPERABILITY	2	01/19/2009		
TEXT 3.1.4 <b>Title:</b> REACTIVITY CONTROL SYSTEMS CONTROL ROD SCRAM TIMES	4	01/30/2009		
TEXT 3.1.5 <b>Title:</b> REACTIVITY CONTROL SYSTEMS CONTROL ROD SCRAM ACCUMULATORS	1	07/06/2005		
TEXT 3.1.6 <b>Title:</b> REACTIVITY CONTROL SYSTEMS ROD PATTERN CONTROL	2	03/24/2005		

## SSSES MANUAL

Manual Name: TSB2

Manual Title: TECHNICAL SPECIFICATIONS BASES UNIT 2 MANUAL

TEXT 3.1.7 3 10/04/2007  
**Title:** REACTIVITY CONTROL SYSTEMS STANDBY LIQUID CONTROL (SLC) SYSTEM

TEXT 3.1.8 3 05/06/2009  
**Title:** REACTIVITY CONTROL SYSTEMS SCRAM DISCHARGE VOLUME (SDV) VENT AND DRAIN VALVES

TEXT 3.2.1 4 05/06/2009  
**Title:** POWER DISTRIBUTION LIMITS AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)

TEXT 3.2.2 3 05/06/2009  
**Title:** POWER DISTRIBUTION LIMITS MINIMUM CRITICAL POWER RATIO (MCPR)

TEXT 3.2.3 2 05/06/2009  
**Title:** POWER DISTRIBUTION LIMITS LINEAR HEAT GENERATION RATE LHGR

TEXT 3.3.1.1 4 05/06/2009  
**Title:** INSTRUMENTATION REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION

TEXT 3.3.1.2 2 01/19/2009  
**Title:** INSTRUMENTATION SOURCE RANGE MONITOR (SRM) INSTRUMENTATION

TEXT 3.3.2.1 2 04/09/2007  
**Title:** INSTRUMENTATION CONTROL ROD BLOCK INSTRUMENTATION

TEXT 3.3.2.2 1 05/06/2009  
**Title:** INSTRUMENTATION FEEDWATER - MAIN TURBINE HIGH WATER LEVEL TRIP INSTRUMENTATION

TEXT 3.3.3.1 7 10/27/2008  
**Title:** INSTRUMENTATION POST ACCIDENT MONITORING (PAM) INSTRUMENTATION

TEXT 3.3.3.2 1 04/18/2005  
**Title:** INSTRUMENTATION REMOTE SHUTDOWN SYSTEM

TEXT 3.3.4.1 1 05/06/2009  
**Title:** INSTRUMENTATION END OF CYCLE RECIRCULATION PUMP TRIP (EOC-RPT) INSTRUMENTATION

## SSES MANUAL

Manual Name: TSB2

Manual Title: TECHNICAL SPECIFICATIONS BASES UNIT 2 MANUAL

TEXT 3.3.4.2	0	11/18/2002	<b>Title:</b> INSTRUMENTATION ANTICIPATED TRANSIENT WITHOUT SCRAM RECIRCULATION PUMP TRIP (ATWS-RPT) INSTRUMENTATION
TEXT 3.3.5.1	4	08/20/2009	<b>Title:</b> INSTRUMENTATION EMERGENCY CORE COOLING SYSTEM (ECCS) INSTRUMENTATION
TEXT 3.3.5.2	0	11/18/2002	<b>Title:</b> INSTRUMENTATION REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM INSTRUMENTATION
TEXT 3.3.6.1	4	05/06/2009	<b>Title:</b> INSTRUMENTATION PRIMARY CONTAINMENT ISOLATION INSTRUMENTATION
TEXT 3.3.6.2	4	09/01/2010	<b>Title:</b> INSTRUMENTATION SECONDARY CONTAINMENT ISOLATION INSTRUMENTATION
TEXT 3.3.7.1	2	10/27/2008	<b>Title:</b> INSTRUMENTATION CONTROL ROOM EMERGENCY OUTSIDE AIR SUPPLY (CREOAS) SYSTEM INSTRUMENTATION
TEXT 3.3.8.1	3	12/17/2007	<b>Title:</b> INSTRUMENTATION LOSS OF POWER (LOP) INSTRUMENTATION
TEXT 3.3.8.2	0	11/18/2002	<b>Title:</b> INSTRUMENTATION REACTOR PROTECTION SYSTEM (RPS) ELECTRIC POWER MONITORING
TEXT 3.4.1	4	07/20/2010	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RECIRCULATION LOOPS OPERATING
TEXT 3.4.2	2	07/20/2010	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) JET PUMPS
TEXT 3.4.3	3	01/13/2012	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) SAFETY/RELIEF VALVES (S/RVS)
TEXT 3.4.4	0	11/18/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS OPERATIONAL LEAKAGE

## SSES MANUAL

Manual Name: TSB2

Manual Title: TECHNICAL SPECIFICATIONS BASES UNIT 2 MANUAL

TEXT 3.4.5	3	03/10/2010	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS PRESSURE ISOLATION VALVE (PIV) LEAKAGE
TEXT 3.4.6	3	01/25/2011	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS LEAKAGE DETECTION INSTRUMENTATION
TEXT 3.4.7	2	10/04/2007	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS SPECIFIC ACTIVITY
TEXT 3.4.8	1	04/18/2005	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RESIDUAL HEAT REMOVAL (RHR) SHUTDOWN COOLING SYSTEM - HOT SHUTDOWN
TEXT 3.4.9	0	11/18/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RESIDUAL HEAT REMOVAL (RHR) SHUTDOWN COOLING SYSTEM - COLD SHUTDOWN
TEXT 3.4.10	3	05/06/2009	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS PRESSURE AND TEMPERATURE (P/T) LIMITS
TEXT 3.4.11	0	11/18/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) REACTOR STEAM DOME PRESSURE
TEXT 3.5.1	3	01/16/2006	<b>Title:</b> EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM ECCS - OPERATING
TEXT 3.5.2	0	11/18/2002	<b>Title:</b> EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM ECCS - SHUTDOWN
TEXT 3.5.3	2	07/09/2010	<b>Title:</b> EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM RCIC SYSTEM
TEXT 3.6.1.1	4	11/09/2011	<b>Title:</b> PRIMARY CONTAINMENT
TEXT 3.6.1.2	1	05/06/2009	<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT AIR LOCK

## SSSES MANUAL

Manual Name: TSB2

Manual Title: TECHNICAL SPECIFICATIONS BASES UNIT 2 MANUAL

TEXT 3.6.1.3	11	04/14/2010	<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT ISOLATION VALVES (PCIVS)
TEXT 3.6.1.4	1	05/06/2009	<b>Title:</b> CONTAINMENT SYSTEMS CONTAINMENT PRESSURE
TEXT 3.6.1.5	1	10/05/2005	<b>Title:</b> CONTAINMENT SYSTEMS DRYWELL AIR TEMPERATURE
TEXT 3.6.1.6	0	11/18/2002	<b>Title:</b> CONTAINMENT SYSTEMS SUPPRESSION CHAMBER-TO-DRYWELL VACUUM BREAKERS
TEXT 3.6.2.1	2	12/17/2007	<b>Title:</b> CONTAINMENT SYSTEMS SUPPRESSION POOL AVERAGE TEMPERATURE
TEXT 3.6.2.2	0	11/18/2002	<b>Title:</b> CONTAINMENT SYSTEMS SUPPRESSION POOL WATER LEVEL
TEXT 3.6.2.3	1	01/16/2006	<b>Title:</b> CONTAINMENT SYSTEMS RESIDUAL HEAT REMOVAL (RHR) SUPPRESSION POOL COOLING
TEXT 3.6.2.4	0	11/18/2002	<b>Title:</b> CONTAINMENT SYSTEMS RESIDUAL HEAT REMOVAL (RHR) SUPPRESSION POOL SPRAY
TEXT 3.6.3.1	2	06/13/2006	<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT HYDROGEN RECOMBINERS
TEXT 3.6.3.2	1	04/18/2005	<b>Title:</b> CONTAINMENT SYSTEMS DRYWELL AIR FLOW SYSTEM
TEXT 3.6.3.3	0	11/18/2002	<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT OXYGEN CONCENTRATION
TEXT 3.6.4.1	7	10/04/2007	<b>Title:</b> CONTAINMENT SYSTEMS SECONDARY CONTAINMENT

## SSES MANUAL

**Manual Name:** TSB2

**Manual Title:** TECHNICAL SPECIFICATIONS BASES UNIT 2 MANUAL

TEXT 3.6.4.2 3 03/10/2010

**Title:** CONTAINMENT SYSTEMS SECONDARY CONTAINMENT ISOLATION VALVES (SCIVS)

TEXT 3.6.4.3 4 09/21/2006

**Title:** CONTAINMENT SYSTEMS STANDBY GAS TREATMENT (SGT) SYSTEM

TEXT 3.7.1 4 04/05/2010

**Title:** PLANT SYSTEMS RESIDUAL HEAT REMOVAL SERVICE WATER (RHRSW) SYSTEM AND THE ULTIMATE HEAT SINK (UHS)

TEXT 3.7.2 2 05/02/2008

**Title:** PLANT SYSTEMS EMERGENCY SERVICE WATER (ESW) SYSTEM

TEXT 3.7.3 1 01/08/2010

**Title:** PLANT SYSTEMS CONTROL ROOM EMERGENCY OUTSIDE AIR SUPPLY (CREOAS) SYSTEM

TEXT 3.7.4 0 11/18/2002

**Title:** PLANT SYSTEMS CONTROL ROOM FLOOR COOLING SYSTEM

TEXT 3.7.5 1 10/04/2007

**Title:** PLANT SYSTEMS MAIN CONDENSER OFFGAS

TEXT 3.7.6 3 01/25/2011

**Title:** PLANT SYSTEMS MAIN TURBINE BYPASS SYSTEM

TEXT 3.7.7 1 10/04/2007

**Title:** PLANT SYSTEMS SPENT FUEL STORAGE POOL WATER LEVEL

TEXT 3.8.1 8 05/06/2009

**Title:** ELECTRICAL POWER SYSTEMS AC SOURCES - OPERATING

TEXT 3.7.8 0 05/06/2009

**Title:** MAINE TURBINE PRESSURE REGULATION SYSTEM

TEXT 3.8.2 0 11/18/2002

**Title:** ELECTRICAL POWER SYSTEMS AC SOURCES - SHUTDOWN



## SSES MANUAL

Manual Name: TSB2

Manual Title: TECHNICAL SPECIFICATIONS BASES UNIT 2 MANUAL

TEXT 3.8.3	2	04/14/2010
<b>Title:</b> ELECTRICAL POWER SYSTEMS DIESEL FUEL OIL LUBE OIL AND STARTING AIR		
TEXT 3.8.4	3	01/19/2009
<b>Title:</b> ELECTRICAL POWER SYSTEMS DC SOURCES - OPERATING		
TEXT 3.8.5	1	12/14/2006
<b>Title:</b> ELECTRICAL POWER SYSTEMS DC SOURCES - SHUTDOWN		
TEXT 3.8.6	1	12/14/2006
<b>Title:</b> ELECTRICAL POWER SYSTEMS BATTERY CELL PARAMETERS		
TEXT 3.8.7	3	03/31/2006
<b>Title:</b> ELECTRICAL POWER SYSTEMS DISTRIBUTION SYSTEMS - OPERATING		
TEXT 3.8.8	0	11/18/2002
<b>Title:</b> ELECTRICAL POWER SYSTEMS DISTRIBUTION SYSTEMS - SHUTDOWN		
TEXT 3.9.1	0	11/18/2002
<b>Title:</b> REFUELING OPERATIONS REFUELING EQUIPMENT INTERLOCKS		
TEXT 3.9.2	1	09/01/2010
<b>Title:</b> REFUELING OPERATIONS REFUEL POSITION ONE-ROD-OUT INTERLOCK		
TEXT 3.9.3	0	11/18/2002
<b>Title:</b> REFUELING OPERATIONS CONTROL ROD POSITION		
TEXT 3.9.4	0	11/18/2002
<b>Title:</b> REFUELING OPERATIONS CONTROL ROD POSITION INDICATION		
TEXT 3.9.5	0	11/18/2002
<b>Title:</b> REFUELING OPERATIONS CONTROL ROD OPERABILITY - REFUELING		
TEXT 3.9.6	1	10/04/2007
<b>Title:</b> REFUELING OPERATIONS REACTOR PRESSURE VESSEL (RPV) WATER LEVEL		

## SSSES MANUAL

Manual Name: TSB2

Manual Title: TECHNICAL SPECIFICATIONS BASES UNIT 2 MANUAL

TEXT 3.9.7	0	11/18/2002	<b>Title:</b> REFUELING OPERATIONS RESIDUAL HEAT REMOVAL (RHR) - HIGH WATER LEVEL
TEXT 3.9.8	0	11/18/2002	<b>Title:</b> REFUELING OPERATIONS RESIDUAL HEAT REMOVAL (RHR) - LOW WATER LEVEL
TEXT 3.10.1	1	01/23/2008	<b>Title:</b> SPECIAL OPERATIONS INSERVICE LEAK AND HYDROSTATIC TESTING OPERATION
TEXT 3.10.2	0	11/18/2002	<b>Title:</b> SPECIAL OPERATIONS REACTOR MODE SWITCH INTERLOCK TESTING
TEXT 3.10.3	0	11/18/2002	<b>Title:</b> SPECIAL OPERATIONS SINGLE CONTROL ROD WITHDRAWAL - HOT SHUTDOWN
TEXT 3.10.4	0	11/18/2002	<b>Title:</b> SPECIAL OPERATIONS SINGLE CONTROL ROD WITHDRAWAL - COLD SHUTDOWN
TEXT 3.10.5	0	11/18/2002	<b>Title:</b> SPECIAL OPERATIONS SINGLE CONTROL ROD DRIVE (CRD) REMOVAL - REFUELING
TEXT 3.10.6	0	11/18/2002	<b>Title:</b> SPECIAL OPERATIONS MULTIPLE CONTROL ROD WITHDRAWAL - REFUELING
TEXT 3.10.7	1	03/24/2005	<b>Title:</b> SPECIAL OPERATIONS CONTROL ROD TESTING - OPERATING
TEXT 3.10.8	2	04/09/2007	<b>Title:</b> SPECIAL OPERATIONS SHUTDOWN MARGIN (SDM) TEST - REFUELING

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
TOC	Table of Contents	18
B 2.0	SAFETY LIMITS BASES	
	Page TS / B 2.0-1	1
	Pages TS / B 2.0-2 and TS / B 2.0-3	4
	Page TS / B 2.0-4	6
	Pages TS / B 2.0-5 through TS / B 2.0-8	1
B 3.0	LCO AND SR APPLICABILITY BASES	
	Page TS / B 3.0-1	1
	Pages TS / B 3.0-2 through TS / B 3.0-4	0
	Pages TS / B 3.0-5 through TS / B 3.0-7	1
	Page TS / B 3.0-8	3
	Pages TS / B 3.0-9 through Page TS / B 3.0-11	2
	Page TS / B 3.0-11a	0
	Page TS / B 3.0-12	1
	Pages TS / B 3.0-13 through TS / B 3.0-15	2
	Pages TS / B 3.0-16 and TS / B 3.0-17	0
B 3.1	REACTIVITY CONTROL BASES	
	Pages B 3.1-1 through B 3.1-4	0
	Page TS / B 3.1-5	1
	Pages TS / B 3.1-6 and TS / B 3.1-7	2
	Pages B 3.1-8 through B 3.1-13	0
	Page TS / B 3.1-14	1
	Page TS / B 3.1-15	0
	Page TS / B 3.1-16	1
	Pages TS / B 3.1-17 through TS / B 3.1-19	0
	Pages TS / B 3.1-20 and TS / B 3.1-21	1
	Page TS / B 3.1-22	0
	Page TS / B 3.1-23	1
	Page TS / B 3.1-24	0
	Pages TS / B 3.1-25 through TS / B 3.1-27	1
	Page TS / B 3.1-28	2
	Page TS / 3.1-29	1
	Pages B 3.1-30 through B 3.1-33	0
	Pages TS / B 3.1.34 through TS / B 3.1-36	1
	Pages TS / B 3.1-37 and TS / B 3.1-38	2
	Pages TS / B 3.1-39 and TS / B 3.1-40	2
	Page TS / B 3.1-40a	0
	Page TS / B 3.1-41	1
	Page TS / B 3.1-42	2

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS BASES)

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages TS / B 3.1-43	1
	Page TS / B 3.1-44	0
	Page TS / B 3.1-45	3
	Page TS / B 3.1-46	0
	Page TS / B 3.1-47	1
	Pages TS / B 3.1-48 and TS / B 3.1-49	1
	Page B 3.1-50	0
	Page TS / B 3.1-51	3
<b>B 3.2</b>	<b>POWER DISTRIBUTION LIMITS BASES</b>	
	Pages TS / B 3.2-1 and TS / B 3.2-2	2
	Page TS / B 3.2-3	4
	Page TS / B 3.2-4	1
	Page TS / B 3.2-5	3
	Page TS / B 3.2-6	4
	Page TS / B 3.2-7	3
	Pages TS / B 3.2-8 and TS / B 3.2-9	4
	Pages TS / B 3.2-10 through TS / B 3.2-12	2
	Page TS / B 3.2-13	1
<b>B 3.3</b>	<b>INSTRUMENTATION</b>	
	Pages TS / B 3.3-1 through TS / B 3.3-4	1
	Page TS / B 3.3-5	2
	Page TS / B 3.3-6	1
	Page TS / B 3.3-7	3
	Page TS / B 3.3-8	4
	Pages TS / B 3.3-9 through TS / B 3.3-13	3
	Page TS / B 3.3-14	4
	Pages TS / B 3.3-15 and TS / B 3.3-16	2
	Pages TS / B 3.3-17 through TS / B 3.3-21	3
	Pages TS / B 3.3-22 through TS / B 3.3-27	2
	Page TS / B 3.3-28	3
	Page TS / B 3.3-29	4
	Pages TS / B 3.3-30 and TS / B 3.3-31	3
	Pages TS / B 3.3-32 and TS / B 3.3-33	4
	Page TS / B 3.3-34	2
	Page TS / B 3.3-34a	1
	Pages TS / B 3.3-34b through TS / B 3.3-34d	0
	Page TS / B 3.3-34e	1
	Pages TS / B 3.3-34f through TS / B 3.3-34i	0
	Pages TS / B 3.3-35 and TS / B 3.3-36	2
	Pages TS / B 3.3-37 and TS / B 3.3-38	1

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Page TS / B 3.3-39	2
	Pages TS / B 3.3-40 through TS / B 3.3-43	2
	Pages TS / B 3.3-44 through TS / B 3.3-54	3
	Pages TS / B 3.3-54a through TS / B 3.3-54e	0
	Page TS / B 3.3-55	1
	Page B 3.3-56	0
	Page TS / B 3.3-57	1
	Page B 3.3-58	0
	Page TS / B 3.3-59	1
	Pages B 3.3-60 through B 3.3-63	0
	Pages TS / B 3.3-64 and TS / B 3.3-65	2
	Page TS / B 3.3-66	4
	Page TS / B 3.3-67	3
	Page TS / B 3.3-68	4
	Page TS / B 3.3-69	5
	Page TS / B 3.3-70	4
	Page TS / B 3.3-71	3
	Pages TS / B 3.3-72 and TS / B 3.3-73	2
	Page TS / B 3.3-74	3
	Page TS / B 3.3-75	2
	Pages TS / B 3.3-75a and TS / B 3.3-75 b	6
	Page TS / B 3.3-75c	5
	Pages B 3.3-76 and TS / B 3.3-77	0
	Page TS / B 3.3-78	1
	Pages B 3.3-79 through B 3.3-81	0
	Page TS / B 3.3-82	1
	Page B 3.3-83	0
	Pages TS / B 3.3-84 and TS / B 3.3-85	1
	Page 3.3-86	0
	Page TS / B 3.3-87	1
	Page B 3.3-88	0
	Page TS / B 3.3-89	1
	Pages B 3.3-90 and B 3.3-91	0
	Pages TS / B 3.3-92 through TS / B 3.3-103	1
	Page TS / B 3.3-104	3
	Pages TS / B 3.3-105 and TS / B 3.3-106	1
	Page TS / B 3.3-107	2
	Page TS / B 3.3-108	1
	Page TS / B 3.3-109	2
	Pages TS / B 3.3-110 through TS / B 3.3-112	1
	Page TS / B 3.3-113	2
	Page TS / B 3.3-114	1
	Page TS / B 3.3-115	2
	Page TS / B 3.3-116	3
	Pages TS / B 3.3-117 and TS / B 3.3-118	2

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages TS / B 3.3-119 through TS / B 3.3-120	1
	Pages TS / B 3.3-121 and TS / B 3.3-122	2
	Page TS / B 3.3-123	1
	Page TS / B 3.3-124	2
	Page TS / B 3.3-124a	0
	Page TS / B 3.3-125	1
	Page TS / B 3.3-126	2
	Page TS / B 3.3-127	3
	Page TS / B 3.3-128	2
	Pages TS / B 3.3-129 through TS / B 3.3-131	1
	Page TS / B 3.3-132	2
	Pages TS / B 3.3-133 and TS / B 3.3-134	1
	Pages B 3.3-135 through B 3.3-137	0
	Page TS / B 3.3-138	1
	Pages B 3.3-139 through B 3.3-149	0
	Pages TS/ B 3.3-150 and TS / B 3.3-151	1
	Pages TS / B 3.3-152 through TS / B 3.3-154	2
	Page TS / B 3.3-155	1
	Pages TS / B 3.3-156 through TS / B 3.3-158	2
	Pages TS / B 3.3-159 through TS / B 3.3-161	1
	Page TS / B 3.3-162	1
	Page TS / B 3.3-163	2
	Page TS / B 3.3-164	1
	Pages TS / B 3.3-165 and TS / B 3.3-166	2
	Pages TS / B 3.3-167 and TS / B 3.3-168	1
	Pages TS / B 3.3-169 and TS / B 3.3-170	2
	Pages TS / B 3.3-171 through TS / B 3.3-177	1
	Page TS / B 3.3-178	2
	Page TS / B 3.3-179	3
	Page TS / B 3.3-179a	2
	Page TS / B 3.3-180	1
	Page TS / B 3.3-181	3
	Page TS / B 3.3-182	1
	Page TS / B 3.3-183	2
	Page TS / B 3.3-184	1
	Page TS / B 3.3-185	4
	Page TS / B 3.3-186	1
	Pages TS / B 3.3-187 and TS / B 3.3-188	2
	Pages TS / B 3.3-189 through TS / B 3.3-191	1
	Page TS / B 3.3-192	0
	Page TS / B 3.3-193	1
	Pages TS / B 3.3-194 and TS / B 3.3-195	0
	Page TS / B 3.3-196	2

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages TS / B 3.3-197 through TS / B 3.3-205	0
	Page TS / B 3.3-206	1
	Pages B 3.3-207 through B 3.3-209	0
	Page TS / B 3.3-210	1
	Page TS / B 3.3-211	2
	Pages TS / B 3.3-212 and TS / B 3.3-213	1
	Pages B 3.3-214 through B 3.3-220	0
B 3.4	REACTOR COOLANT SYSTEM BASES	
	Pages TS / B 3.4-1 and TS / B 3.4-2	2
	Pages TS / B 3.4-3 through TS / B 3.4-5	4
	Pages TS / B 3.4-6 through TS / B 3.4-9	3
	Page TS / B 3.4-10	1
	Pages TS / B 3.4-11 and TS / B 3.4-12	0
	Page TS / B 3.4-13	1
	Page TS / B 3.4-14	0
	Page TS / B 3.4-15	2
	Pages TS / B 3.4-16 and TS / B 3.4-17	4
	Page TS / B 3.4-18	2
	Pages B 3.4-19 through B 3.4-23	0
	Pages TS / B 3.4-24 through TS / B 3.4-27	0
	Page TS / B 3.4-28	1
	Page TS / B 3.4-29	3
	Page TS / B 3.4-30	1
	Page TS / B 3.4-31	0
	Pages TS / B 3.4-32 and TS / B 3.4-33	1
	Page TS / B 3.4-34	0
	Pages TS / B 3.4-35 and TS / B 3.4-36	1
	Page TS / B 3.4-37	2
	Page B 3.4-38	1
	Pages B 3.4-39 and B 3.4-40	0
	Page TS / B 3.4-41	1
	Pages B 3.4-42 through B 3.4-48	0
	Page TS / B 3.4-49	3
	Pages TS / B 3.4-50 through TS / B 3.4-52	2
	Page TS / B 3.4-53	1
	Pages TS / B 3.4-54 through TS / B 3.4-57	2
	Pages TS / B 3.4-58 through TS / B 3.4-60	1
B 3.5	ECCS AND RCIC BASES	
	Pages TS / B 3.5-1 and TS / B 3.5-2	1
	Pages TS / B 3.5-3 through TS / B 3.5-6	2
	Pages TS / B 3.5-7 through TS / B 3.5-10	1
	Pages TS / B 3.5-11 and TS / B 3.5-12	2
	Pages TS / B 3.6-13 and TS / B 3.5-14	1

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages TS / B 3.5-15 and TS / B.3.5-16	2
	Page TS / B 3.5-17	3
	Page TS / B 3.5-18	1
	Pages B 3.5-19 through B 3.5-24	0
	Pages TS / B 3.5-25 through TS / B 3.5-27	1
	Page TS / B 3.5-28	0
	Page TS / B 3.5-29	1
	Pages TS / B 3.5-30 and TS / B 3.5-31	0
B 3.6	CONTAINMENT SYSTEMS BASES	
	Page TS / B 3.6-1	2
	Page TS / B 3.6-1a	3
	Page TS / B 3.6-2	4
	Page TS / B 3.6-3	3
	Page TS / B 3.6-4	4
	Page TS / B 3.6-5	3
	Page TS / B 3.6-6	4
	Pages TS / B 3.6-6a and TS / B 3.6-6b	3
	Page TS / B 3.6-6c	0
	Page B 3.6-7	0
	Page TS / 3.6-8	1
	Pages B 3.6-9 through B 3.6-14	0
	Page TS / B 3.6-15	3
	Page TS / B 3.6-15a	0
	Page TS / B 3.6-15b	3
	Pages TS / B 3.6-16 and TS / B 3.6-17	2
	Page TS / B 3.6-17a	0
	Pages TS / B 3.6-18 and TS / B 3.6-19	1
	Page TS / B 3.6-20	2
	Page TS / B 3.6-21	3
	Pages TS / B 3.6-21a and TS / B 3.6-21b	0
	Pages TS / B 3.6-22 and TS / B 3.6-23	2
	Pages TS / B 3.6-24 and TS / B 3.6-25	1
	Pages TS / B 3.6-26 and TS / B 3.6-27	3
	Page TS / B 3.6-28	7
	Page TS / B 3.6-29	5
	Page TS / B 3.6-29a	0
	Page TS / B 3.6-30	2
	Page TS / B 3.6-31	3
	Pages TS / B 3.6-32 and TS / B 3.6-33	2



SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Page TS / B 3.6-34	1
	Page TS / B 3.6-35	3
	Pages TS / B 3.6-36 and TS / B 3.6-37	2
	Page TS / B 3.6-38	3
	Page TS / B 3.6-39	7
	Page TS / B 3.6-40	1
	Pages B 3.6-41 and B 3.6-42	0
	Pages TS / B 3.6-43 and TS / B 3.6-44	1
	Page TS / B 3.6-45	2
	Pages TS / B 3.6-46 through TS / B 3.6-50	1
	Page TS / B 3.6-51	2
	Pages B 3.6-52 through B 3.6-55	0
	Pages TS / B 3.6-56 and TS / B 3.6-57	2
	Pages B 3.6-58 through B 3.6-62	0
	Pages TS / B 3.6-63 and TS / B 3.6-64	1
	Pages B 3.6-65 through B 3.6-68	0
	Pages B 3.6-69 through B 3.6-71	1
	Page TS / B 3.6-72	2
	Pages TS / B 3.6-73 and TS / B 3.6-74	1
	Pages B 3.6-75 and B 3.6-76	0
	Page TS / B 3.6-77	1
	Pages B 3.6-78 through B 3.6-82	0
	Page TS / B 3.6-83	3
	Page TS / B 3.6-84	2
	Page TS / B 3.6-85	4
	Page TS / B 3.6-86 through TS / B 3.6-87a	2
	Page TS / B 3.6-88	4
	Page TS / B 3.6-89	2
	Page TS / B 3.6-90	3
	Pages TS / B 3.6-91 through TS / B 3.6-95	1
	Page TS / B 3.6-96	2
	Pages TS / B 3.6-97 and TS / B 3.6-98	1
	Page TS / B 3.6-99	3
	Page TS / B 3.6-99a	0
	Pages TS / B 3.6-100 and TS / B 3.6-101	1
	Pages TS / B 3.6-102 and TS / B 3.6-103	2
	Page TS / B 3.6-104	3
	Page TS / B 3.6-105	2
	Page TS / B 3.6-106	3

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS BASES)

<u>Section</u>	<u>Title</u>	<u>Revision</u>
B 3.7	PLANT SYSTEMS BASES	
	Page TS / B 3.7-1	3
	Page TS / B 3.7-2	4
	Pages TS / B 3.7-3 through TS / B 3.7-5	3
	Page TS / B 3.7-5a	1
	Page TS / B 3.7-6	3
	Page TS / B 3.7-6a	2
	Page TS / B 3.7-6b	1
	Page TS / B 3.7-6c	2
	Page TS / B 3.7-7	3
	Page TS / B 3.7-8	2
	Pages B 3.7-9 through B 3.7-11	0
	Pages TS / B 3.7-12 and TS / B 3.7-13	2
	Pages TS / B 3.7-14 through TS / B 3.7-18	3
	Page TS / B 3.7-18a	1
	Pages TS / B 3.7-18b through TS / B 3.7-18e	0
	Pages TS / B 3.7-19 through TS / B 3.7-24	1
	Pages TS / B 3.7-25 and TS / B 3.7-26	0
	Page TS / B 3.7-27	4
	Pages TS / B 3.7-28 and TS / B 3.7-29	3
	Pages TS / B 3.7-30 and TS / B 3.7-31	1
	Page TS / B 3.7-32	0
	Page TS / B 3.7-33	1
	Pages TS / B 3.7-34 through TS / B 3.7-37	0
B 3.8	ELECTRICAL POWER SYSTEMS BASES	
	Page TS / B 3.8-1	1
	Pages B 3.8-2 and B 3.8-3	0
	Page TS / B 3.8-4	1
	Pages TS / B 3.8-4a and TS / B 3.8-4b	0
	Pages TS / B 3.8-5 and TS / B 3.8-6	3
	Page TS / B 3.8-6a	1
	Pages B 3.8-7 and B 3.8-8	0
	Page TS / B 3.8-9	2
	Pages TS / B 3.8-10 and TS / B 3.8-11	1
	Pages B 3.8-12 through B 3.8-18	0
	Page TS / B 3.8-19	1
	Pages B 3.8-20 through B 3.8-22	0
	Page TS / B 3.8-23	1
	Page B 3.8-24	0
	Pages TS / B 3.8-25 and TS / B 3.8-26	1

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages B 3.8-27 through B 3.8-35	0
	Page TS / B 3.8-36	1
	Page TS / B 3.8-37	0
	Page TS / B 3.8-38	1
	Pages TS / B 3.8-39 through TS / B 3.8-46	0
	Page TS / B 3.8-47	1
	Pages TS / B 3.8-48 through TS / B 3.8-50	0
	Pages TS / B 3.8-51 through TS / B 3.8-53	1
	Page TS / B 3.8-54	0
	Page TS / B 3.8-55	1
	Pages TS / B 3.8-56 through TS / B 3.8-59	2
	Pages TS / B 3.8-60 through TS / B 3.8-64	3
	Page TS / B 3.8-65	4
	Page TS / B 3.8-66	5
	Pages TS / B 3.8-67 and TS / B 3.8-68	4
	Page TS / B 3.8-69	5
	Pages TS / B 3.8-70 through TS / B 3.8-83	1
	Pages TS / B 3.8-83A through TS / B 3.8-83D	0
	Pages B 3.8-84 through B 3.8-85	0
	Page TS / B 3.8-86	1
	Page TS / B 3.8-87	2
	Pages TS / B 3.8-88 through TS / B 3.8-93	1
	Pages B 3.8-94 through B 3.8-99	0
B 3.9	REFUELING OPERATIONS BASES	
	Pages TS / B 3.9-1 and TS / B 3.9-2	1
	Pages TS / B 3.9-2a through TS / B 3.9-5	1
	Pages TS / B 3.9-6 through TS / B 3.9-8	0
	Pages B 3.9-9 through B 3.9-18	0
	Pages TS / B 3.9-19 through TS / B 3.9-21	1
	Pages B 3.9-22 through B 3.9-30	0
B 3.10	SPECIAL OPERATIONS BASES	
	Page TS / B 3.10-1	2
	Pages TS / B 3.10-2 through TS / B 3.10-5	1
	Pages B 3.10-6 through B 3.10-32	0
	Page TS / B 3.10-33	2
	Page B 3.10-34	0
	Page B 3.10-35	1
	Pages B 3.10-36 and B 3.10-37	0
	Page B 3.10-38	1
	Page TS / B 3.10-39	2

TSB2 Text LOES.doc  
1/10/2012

B 3.4 REACTOR COOLANT SYSTEM (RCS)

B 3.4.3 Safety/Relief Valves (S/RVs)

BASES

**BACKGROUND** The ASME Boiler and Pressure Vessel Code requires the reactor pressure vessel be protected from overpressure during upset conditions by self-actuated safety valves. As part of the nuclear pressure relief system, the size and number of S/RVs are selected such that peak pressure in the nuclear system will not exceed the ASME Code limits for the reactor coolant pressure boundary (RCPB).

The S/RVs are located on the main steam lines between the reactor vessel and the first isolation valve within the drywell. There are a total of 16 S/RVs of which any 14 are required to be OPERABLE. The S/RVs can actuate by either of two modes: the safety mode or the relief mode. In the safety mode (or spring mode of operation), the valve opens when steam pressure at the valve inlet overcomes the spring force holding the valve closed. This satisfies the Code requirement.

° Each S/RV discharges steam through a discharge line to a point below the minimum water level in the suppression pool. Six S/RVs also serve as the Automatic Depressurization System (ADS) valves. The ADS requirements are specified in LCO 3.5.1, "ECCS-Operating."

**APPLICABLE  
SAFETY  
ANALYSES**

The overpressure protection system must accommodate the most severe pressurization transient. Evaluations have determined that the most severe transient is the closure of all main steam isolation valves (MSIVs), followed by reactor scram on high neutron flux (i.e., failure of the direct scram associated with MSIV position) (Ref. 1). For the purpose of the analyses, 14 of the 16 S/RVs are assumed to operate in the safety mode. The analysis results demonstrate that the design S/RV capacity is capable of maintaining reactor pressure below the ASME Code limit of 110% of vessel design pressure (110% x 1250 psig = 1375 psig). This LCO helps to ensure that the acceptance limit of 1375 psig is met during the Design Basis Event.

(continued)

BASES

---

APPLICABLE  
SAFETY  
ANALYSES  
(continued)

From an overpressure standpoint, the design basis events are bounded by the MSIV closure with flux scram event described above. Reference 2 discusses additional events that are expected to actuate the S/RVs.

S/RVs satisfy Criterion 3 of the NRC Policy Statement (Ref. 4).

---

LCO

The safety function of 14 of the 16 S/RVs are required to be OPERABLE to satisfy the assumptions of the safety analysis (Refs. 1 and 2). The requirements of this LCO are applicable only to the capability of the S/RVs to mechanically open to relieve excess pressure when the lift setpoint is exceeded (safety function).

The S/RV setpoints are established to ensure that the ASME Code limit on peak reactor pressure is satisfied. The ASME Code specifications require the lowest safety valve setpoint to be at or below vessel design pressure (1250 psig) and the highest safety valve to be set so that the total accumulated pressure does not exceed 110% of the design pressure for overpressurization conditions. The transient evaluations in the FSAR are based on these setpoints, but also include the additional uncertainty of + 3%, - 5 % of the nominal setpoint to provide an added degree of conservatism.

Operation with fewer valves OPERABLE than specified, or with setpoints outside the ASME limits, could result in a more severe reactor response to a transient than predicted, possibly resulting in the ASME Code limit on reactor pressure being exceeded.

---

APPLICABILITY

In MODES 1, 2, and 3, all required S/RVs must be OPERABLE, since considerable energy may be in the reactor core and the limiting design basis transients are assumed to occur in these MODES. The S/RVs may be required to provide pressure relief to discharge energy from the core until such time that the Residual Heat Removal (RHR) System is capable of dissipating the core heat.

In MODE 4 reactor pressure is low enough that the overpressure limit is unlikely to be approached by assumed

---

(continued)

BASES

---

SURVEILLANCE  
REQUIREMENTS

SR 3.4.3.1 (continued)

The Frequency of this Surveillance is established in accordance with the Inservice Testing Program.

---

REFERENCES

1. FSAR, Section 5.2.2.1.4.
  2. FSAR, Section 15.
  3. ASME Operation and Maintenance Code.
  4. Final Policy Statement on Technical Specifications Improvements, July 22, 1993 (58 FR 39132).
-

MANUAL HARD COPY DISTRIBUTION  
DOCUMENT TRANSMITTAL 2012-2493

---

USER INFORMATION:

GERLACH\*ROSE M                    EMPL#:028401    CA#: 0363

Address: NUCSA2

Phone#: 254-3194

TRANSMITTAL INFORMATION:

TO:        GERLACH\*ROSE M            01/16/2012

LOCATION:   NRC REGION 1 TECH SPECS

FROM:     NUCLEAR RECORDS DOCUMENT CONTROL CENTER (NUCSA-2)

THE FOLLOWING CHANGES HAVE OCCURRED TO THE HARDCOPY OR ELECTRONIC MANUAL ASSIGNED TO YOU. HARDCOPY USERS MUST ENSURE THE DOCUMENTS PROVIDED MATCH THE INFORMATION ON THIS TRANSMITTAL. WHEN REPLACING THIS MATERIAL IN YOUR HARDCOPY MANUAL, ENSURE THE UPDATE DOCUMENT ID IS THE SAME DOCUMENT ID YOU'RE REMOVING FROM YOUR MANUAL. TOOLS FROM THE HUMAN PERFORMANCE TOOL BAG SHOULD BE UTILIZED TO ELIMINATE THE CHANCE OF ERRORS.

ATTENTION: "REPLACE" directions do not affect the Table of Contents, Therefore no TOC will be issued with the updated material.

TSB1 - TECHNICAL SPECIFICATION BASES UNIT 1 MANUAL

REMOVE MANUAL TABLE OF CONTENTS    DATE: 11/30/2011

ADD        MANUAL TABLE OF CONTENTS    DATE: 01/13/2012

CATEGORY: DOCUMENTS    TYPE: TSB1

ID: TEXT 3.4.3  
ADD: REV: 3

REMOVE: REV:2

CATEGORY: DOCUMENTS TYPE: TSB1  
ID: TEXT LOES  
REMOVE: REV:102

ADD: REV: 103

ANY DISCREPANCIES WITH THE MATERIAL PROVIDED, CONTACT DCS @ X3107 OR X3136 FOR ASSISTANCE. UPDATES FOR HARDCOPY MANUALS WILL BE DISTRIBUTED WITHIN 3 DAYS IN ACCORDANCE WITH DEPARTMENT PROCEDURES. PLEASE MAKE ALL CHANGES AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX UPON COMPLETION OF UPDATES. FOR ELECTRONIC MANUAL USERS, ELECTRONICALLY REVIEW THE APPROPRIATE DOCUMENTS AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX.



# SSES MANUAL

Manual Name: TSB1

Manual Title: TECHNICAL SPECIFICATION BASES UNIT 1 MANUAL

## Table Of Contents

Issue Date: 01/13/2012

<u>Procedure Name</u>	<u>Rev</u>	<u>Issue Date</u>	<u>Change ID</u>	<u>Change Number</u>
TEXT LOES	103	01/13/2012		
<b>Title:</b> LIST OF EFFECTIVE SECTIONS				
TEXT TOC	20	09/01/2010		
<b>Title:</b> TABLE OF CONTENTS				
TEXT 2.1.1	5	05/06/2009		
<b>Title:</b> SAFETY LIMITS (SLS) REACTOR CORE SLS				
TEXT 2.1.2	1	10/04/2007		
<b>Title:</b> SAFETY LIMITS (SLS) REACTOR COOLANT SYSTEM (RCS) PRESSURE S				
TEXT 3.0	3	08/20/2009		
<b>Title:</b> LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY				
TEXT 3.1.1	1	04/18/2006		
<b>Title:</b> REACTIVITY CONTROL SYSTEMS SHUTDOWN MARGIN (SDM)				
TEXT 3.1.2	0	11/15/2002		
<b>Title:</b> REACTIVITY CONTROL SYSTEMS REACTIVITY ANOMALIES				
TEXT 3.1.3	2	01/19/2009		
<b>Title:</b> REACTIVITY CONTROL SYSTEMS CONTROL ROD OPERABILITY				
TEXT 3.1.4	4	01/30/2009		
<b>Title:</b> REACTIVITY CONTROL SYSTEMS CONTROL ROD SCRAM TIMES				
TEXT 3.1.5	1	07/06/2005		
<b>Title:</b> REACTIVITY CONTROL SYSTEMS CONTROL ROD SCRAM ACCUMULATORS				
TEXT 3.1.6	2	04/18/2006		
<b>Title:</b> REACTIVITY CONTROL SYSTEMS ROD PATTERN CONTROL				

# SSSES MANUAL

**Manual Name:** TSB1

**Manual Title:** TECHNICAL SPECIFICATION BASES UNIT 1 MANUAL

TEXT 3.1.7 3 04/23/2008  
**Title:** REACTIVITY CONTROL SYSTEMS STANDBY LIQUID CONTROL (SLC) SYSTEM

TEXT 3.1.8 3 05/06/2009  
**Title:** REACTIVITY CONTROL SYSTEMS SCRAM DISCHARGE VOLUME (SDV) VENT AND DRAIN VALVES

TEXT 3.2.1 2 04/23/2008  
**Title:** POWER DISTRIBUTION LIMITS AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)

TEXT 3.2.2 3 05/06/2009  
**Title:** POWER DISTRIBUTION LIMITS MINIMUM CRITICAL POWER RATIO (MCPR)

TEXT 3.2.3 2 04/23/2008  
**Title:** POWER DISTRIBUTION LIMITS LINEAR HEAT GENERATION RATE (LHGR)

TEXT 3.3.1.1 4 04/23/2008  
**Title:** INSTRUMENTATION REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION

TEXT 3.3.1.2 2 01/19/2009  
**Title:** INSTRUMENTATION SOURCE RANGE MONITOR (SRM) INSTRUMENTATION

TEXT 3.3.2.1 3 04/23/2008  
**Title:** INSTRUMENTATION CONTROL ROD BLOCK INSTRUMENTATION

TEXT 3.3.2.2 2 04/05/2010  
**Title:** INSTRUMENTATION FEEDWATER MAIN TURBINE HIGH WATER LEVEL TRIP INSTRUMENTATION

TEXT 3.3.3.1 8 10/27/2008  
**Title:** INSTRUMENTATION POST ACCIDENT MONITORING (PAM) INSTRUMENTATION

TEXT 3.3.3.2 1 04/18/2005  
**Title:** INSTRUMENTATION REMOTE SHUTDOWN SYSTEM

TEXT 3.3.4.1 1 04/23/2008  
**Title:** INSTRUMENTATION END OF CYCLE RECIRCULATION PUMP TRIP (EOC-RPT) INSTRUMENTATION

## SSES MANUAL

**Manual Name:** TSB1

**Manual Title:** TECHNICAL SPECIFICATION BASES UNIT 1 MANUAL

TEXT 3.3.4.2	0	11/15/2002	<b>Title:</b> INSTRUMENTATION ANTICIPATED TRANSIENT WITHOUT SCRAM RECIRCULATION PUMP TRIP (ATWS-RPT) INSTRUMENTATION
TEXT 3.3.5.1	3	08/20/2009	<b>Title:</b> INSTRUMENTATION EMERGENCY CORE COOLING SYSTEM (ECCS) INSTRUMENTATION
TEXT 3.3.5.2	0	11/15/2002	<b>Title:</b> INSTRUMENTATION REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM INSTRUMENTATION
TEXT 3.3.6.1	4	04/23/2008	<b>Title:</b> INSTRUMENTATION PRIMARY CONTAINMENT ISOLATION INSTRUMENTATION
TEXT 3.3.6.2	4	09/01/2010	<b>Title:</b> INSTRUMENTATION SECONDARY CONTAINMENT ISOLATION INSTRUMENTATION
TEXT 3.3.7.1	2	10/27/2008	<b>Title:</b> INSTRUMENTATION CONTROL ROOM EMERGENCY OUTSIDE AIR SUPPLY (CREOAS) SYSTEM INSTRUMENTATION
TEXT 3.3.8.1	2	12/17/2007	<b>Title:</b> INSTRUMENTATION LOSS OF POWER (LOP) INSTRUMENTATION
TEXT 3.3.8.2	0	11/15/2002	<b>Title:</b> INSTRUMENTATION REACTOR PROTECTION SYSTEM (RPS) ELECTRIC POWER MONITORING
TEXT 3.4.1	4	04/27/2010	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RECIRCULATION LOOPS OPERATING
TEXT 3.4.2	2	04/27/2010	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) JET PUMPS
TEXT 3.4.3	3	01/13/2012	<b>Title:</b> REACTOR COOLANT SYSTEM RCS SAFETY RELIEF VALVES S/RVS
TEXT 3.4.4	0	11/15/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS OPERATIONAL LEAKAGE

## SSES MANUAL

Manual Name: TSB1

Manual Title: TECHNICAL SPECIFICATION BASES UNIT 1. MANUAL

TEXT 3.4.5 1 01/16/2006  
**Title:** REACTOR COOLANT SYSTEM (RCS) RCS PRESSURE ISOLATION VALVE (PIV) LEAKAGE

TEXT 3.4.6 3 01/25/2011  
**Title:** REACTOR COOLANT SYSTEM (RCS) RCS LEAKAGE DETECTION INSTRUMENTATION

TEXT 3.4.7 2 10/04/2007  
**Title:** REACTOR COOLANT SYSTEM (RCS) RCS SPECIFIC ACTIVITY

TEXT 3.4.8 1 04/18/2005  
**Title:** REACTOR COOLANT SYSTEM (RCS) RESIDUAL HEAT REMOVAL (RHR) SHUTDOWN COOLING SYSTEM  
- HOT SHUTDOWN

TEXT 3.4.9 0 11/15/2002  
**Title:** REACTOR COOLANT SYSTEM (RCS) RESIDUAL HEAT REMOVAL (RHR) SHUTDOWN COOLING SYSTEM  
- COLD SHUTDOWN

TEXT 3.4.10 3 04/23/2008  
**Title:** REACTOR COOLANT SYSTEM (RCS) RCS PRESSURE AND TEMPERATURE (P/T) LIMITS

TEXT 3.4.11 0 11/15/2002  
**Title:** REACTOR COOLANT SYSTEM (RCS) REACTOR STEAM DOME PRESSURE

TEXT 3.5.1 2 01/16/2006  
**Title:** EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC)  
SYSTEM ECCS - OPERATING

TEXT 3.5.2 0 11/15/2002  
**Title:** EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC)  
SYSTEM ECCS - SHUTDOWN

TEXT 3.5.3 2 07/09/2010  
**Title:** EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC)  
SYSTEM RCIC SYSTEM

TEXT 3.6.1.1 4 11/09/2011  
**Title:** PRIMARY CONTAINMENT

TEXT 3.6.1.2 1 04/23/2008  
**Title:** CONTAINMENT SYSTEMS PRIMARY CONTAINMENT AIR LOCK

## SSES MANUAL

**Manual Name:** TSB1

**Manual Title:** TECHNICAL SPECIFICATION BASES UNIT 1 MANUAL

TEXT 3.6.1.3	9	04/14/2010		
<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT ISOLATION VALVES (PCIVS)				
			LDCN	3092
TEXT 3.6.1.4	1	04/23/2008		
<b>Title:</b> CONTAINMENT SYSTEMS CONTAINMENT PRESSURE				
TEXT 3.6.1.5	1	10/05/2005		
<b>Title:</b> CONTAINMENT SYSTEMS DRYWELL AIR TEMPERATURE				
TEXT 3.6.1.6	0	11/15/2002		
<b>Title:</b> CONTAINMENT SYSTEMS SUPPRESSION CHAMBER-TO-DRYWELL VACUUM BREAKERS				
TEXT 3.6.2.1	2	04/23/2008		
<b>Title:</b> CONTAINMENT SYSTEMS SUPPRESSION POOL AVERAGE TEMPERATURE				
TEXT 3.6.2.2	0	11/15/2002		
<b>Title:</b> CONTAINMENT SYSTEMS SUPPRESSION POOL WATER LEVEL				
TEXT 3.6.2.3	1	01/16/2006		
<b>Title:</b> CONTAINMENT SYSTEMS RESIDUAL HEAT REMOVAL (RHR) SUPPRESSION POOL COOLING				
TEXT 3.6.2.4	0	11/15/2002		
<b>Title:</b> CONTAINMENT SYSTEMS RESIDUAL HEAT REMOVAL (RHR) SUPPRESSION POOL SPRAY				
TEXT 3.6.3.1	2	06/13/2006		
<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT HYDROGEN RECOMBINERS				
TEXT 3.6.3.2	1	04/18/2005		
<b>Title:</b> CONTAINMENT SYSTEMS DRYWELL AIR FLOW SYSTEM				
TEXT 3.6.3.3	0	11/15/2002		
<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT OXYGEN CONCENTRATION				
TEXT 3.6.4.1	7	10/04/2007		
<b>Title:</b> CONTAINMENT SYSTEMS SECONDARY CONTAINMENT				

## SSES MANUAL

**Manual Name:** TSB1

**Manual Title:** TECHNICAL SPECIFICATION BASES UNIT 1 MANUAL

TEXT 3.6.4.2 3 03/10/2010  
**Title:** CONTAINMENT SYSTEMS SECONDARY CONTAINMENT ISOLATION VALVES (SCIIVS)

TEXT 3.6.4.3 4 09/21/2006  
**Title:** CONTAINMENT SYSTEMS STANDBY GAS TREATMENT (SGT) SYSTEM

TEXT 3.7.1 4 04/05/2010  
**Title:** PLANT SYSTEMS RESIDUAL HEAT REMOVAL SERVICE WATER (RHRSW) SYSTEM AND THE ULTIMATE HEAT SINK (UHS)

TEXT 3.7.2 2 02/11/2009  
**Title:** PLANT SYSTEMS EMERGENCY SERVICE WATER (ESW) SYSTEM

TEXT 3.7.3 1 01/08/2010  
**Title:** PLANT SYSTEMS CONTROL ROOM EMERGENCY OUTSIDE AIR SUPPLY (CREOAS) SYSTEM

TEXT 3.7.4 0 11/15/2002  
**Title:** PLANT SYSTEMS CONTROL ROOM FLOOR COOLING SYSTEM

TEXT 3.7.5 1 10/04/2007  
**Title:** PLANT SYSTEMS MAIN CONDENSER OFFGAS

TEXT 3.7.6 2 04/23/2008  
**Title:** PLANT SYSTEMS MAIN TURBINE BYPASS SYSTEM

TEXT 3.7.7 1 10/04/2007  
**Title:** PLANT SYSTEMS SPENT FUEL STORAGE POOL WATER LEVEL

TEXT 3.7.8 0 04/23/2008  
**Title:** PLANT SYSTEMS

TEXT 3.8.1 6 05/06/2009  
**Title:** ELECTRICAL POWER SYSTEMS AC SOURCES - OPERATING

TEXT 3.8.2 0 11/15/2002  
**Title:** ELECTRICAL POWER SYSTEMS AC SOURCES - SHUTDOWN

## SSES MANUAL

Manual Name: TSB1

Manual Title: TECHNICAL SPECIFICATION BASES UNIT 1 MANUAL

TEXT 3.8.3 2 04/14/2010  
**Title:** ELECTRICAL POWER SYSTEMS DIESEL FUEL OIL, LUBE OIL, AND STARTING AIR

TEXT 3.8.4 3 01/19/2009  
**Title:** ELECTRICAL POWER SYSTEMS DC SOURCES - OPERATING

TEXT 3.8.5 1 12/14/2006  
**Title:** ELECTRICAL POWER SYSTEMS DC SOURCES - SHUTDOWN

TEXT 3.8.6 1 12/14/2006  
**Title:** ELECTRICAL POWER SYSTEMS BATTERY CELL PARAMETERS

TEXT 3.8.7 1 10/05/2005  
**Title:** ELECTRICAL POWER SYSTEMS DISTRIBUTION SYSTEMS - OPERATING

TEXT 3.8.8 0 11/15/2002  
**Title:** ELECTRICAL POWER SYSTEMS DISTRIBUTION SYSTEMS - SHUTDOWN

TEXT 3.9.1 0 11/15/2002  
**Title:** REFUELING OPERATIONS REFUELING EQUIPMENT INTERLOCKS

TEXT 3.9.2 1 09/01/2010  
**Title:** REFUELING OPERATIONS REFUEL POSITION ONE-ROD-OUT INTERLOCK

TEXT 3.9.3 0 11/15/2002  
**Title:** REFUELING OPERATIONS CONTROL ROD POSITION

TEXT 3.9.4 0 11/15/2002  
**Title:** REFUELING OPERATIONS CONTROL ROD POSITION INDICATION

TEXT 3.9.5 0 11/15/2002  
**Title:** REFUELING OPERATIONS CONTROL ROD OPERABILITY - REFUELING

TEXT 3.9.6 1 10/04/2007  
**Title:** REFUELING OPERATIONS REACTOR PRESSURE VESSEL (RPV) WATER LEVEL

## SSES MANUAL

Manual Name: TSB1

Manual Title: TECHNICAL SPECIFICATION BASES UNIT 1 MANUAL

TEXT 3.9.7	0	11/15/2002	<b>Title:</b> REFUELING OPERATIONS RESIDUAL HEAT REMOVAL (RHR) - HIGH WATER LEVEL
TEXT 3.9.8	0	11/15/2002	<b>Title:</b> REFUELING OPERATIONS RESIDUAL HEAT REMOVAL (RHR) - LOW WATER LEVEL
TEXT 3.10.1	1	01/23/2008	<b>Title:</b> SPECIAL OPERATIONS INSERVICE LEAK AND HYDROSTATIC TESTING OPERATION
TEXT 3.10.2	0	11/15/2002	<b>Title:</b> SPECIAL OPERATIONS REACTOR MODE SWITCH INTERLOCK TESTING
TEXT 3.10.3	0	11/15/2002	<b>Title:</b> SPECIAL OPERATIONS SINGLE CONTROL ROD WITHDRAWAL - HOT SHUTDOWN
TEXT 3.10.4	0	11/15/2002	<b>Title:</b> SPECIAL OPERATIONS SINGLE CONTROL ROD WITHDRAWAL - COLD SHUTDOWN
TEXT 3.10.5	0	11/15/2002	<b>Title:</b> SPECIAL OPERATIONS SINGLE CONTROL ROD DRIVE (CRD) REMOVAL - REFUELING
TEXT 3.10.6	0	11/15/2002	<b>Title:</b> SPECIAL OPERATIONS MULTIPLE CONTROL ROD WITHDRAWAL - REFUELING
TEXT 3.10.7	1	04/18/2006	<b>Title:</b> SPECIAL OPERATIONS CONTROL ROD TESTING - OPERATING
TEXT 3.10.8	1	04/12/2006	<b>Title:</b> SPECIAL OPERATIONS SHUTDOWN MARGIN (SDM) TEST - REFUELING



SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS BASES)

<u>Section</u>	<u>Title</u>	<u>Revision</u>
TOC	Table of Contents	20
B 2.0	SAFETY LIMITS BASES	
	Page B 2.0-1	0
	Page TS / B 2.0-2	3
	Page TS / B 2.0-3	5
	Page TS / B 2.0-4	3
	Page TS / B 2.0-5	5
	Page TS / B 2.0-6	1
	Pages TS / B 2.0-7 through TS / B 2.0-9	1
B 3.0	LCO AND SR APPLICABILITY BASES	
	Page TS / B 3.0-1	1
	Pages TS / B 3.0-2 through TS / B 3.0-4	0
	Pages TS / B 3.0-5 through TS / B 3.0-7	1
	Page TS / B 3.0-8	3
	Pages TS / B 3.0-9 through TS / B 3.0-11	2
	Page TS / B 3.0-11a	0
	Page TS / B 3.0-12	1
	Pages TS / B 3.0-13 through TS / B 3.0-15	2
	Pages TS / B 3.0-16 and TS / B 3.0-17	0
B 3.1	REACTIVITY CONTROL BASES	
	Pages B 3.1-1 through B 3.1-4	0
	Page TS / B 3.1-5	1
	Pages TS / B 3.1-6 and TS / B 3.1-7	2
	Pages B 3.1-8 through B 3.1-13	0
	Page TS / B 3.1-14	1
	Page B 3.1-15	0
	Page TS / B 3.1-16	1
	Pages B 3.1-17 through B 3.1-19	0
	Pages TS / B 3.1-20 and TS / B 3.1-21	1
	Page TS / B 3.1-22	0
	Page TS / B 3.1-23	1
	Page TS / B 3.1-24	0
	Pages TS / B 3.1-25 through TS / B 3.1-27	1
	Page TS / B 3.1-28	2
	Page TS / B 3.1-29	1
	Pages B 3.1-30 through B 3.1-33	0
	Pages TS / B 3.3-34 through TS / B 3.3-36	1
	Pages TS / B 3.1-37 and TS / B 3.1-38	2
	Pages TS / B 3.1-39 and TS / B 3.1-40	2
	Page TS / B 3.1-40a	0
	Pages TS / B 3.1-41 and TS / B 3.1-42	2

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Page TS / B 3.1.43	1
	Page TS / B 3.1.44	0
	Page TS / B 3.1.45	3
	Pages TS / B 3.1.46 through TS / B 3.1.49	1
	Page TS / B 3.1.50	0
	Page TS / B 3.1.51	3
<b>B 3.2</b>	<b>POWER DISTRIBUTION LIMITS BASES</b>	
	Page TS / B 3.2-1	2
	Pages TS / B 3.2-2 and TS / B 3.2-3	3
	Pages TS / B 3.2-4 and TS / B 3.2-5	2
	Page TS / B 3.2-6	3
	Page B 3.2-7	1
	Pages TS / B 3.2-8 and TS / B 3.2-9	3
	Page TS / B 3.2.10	2
	Page TS / B 3.2-11	3
	Page TS / B 3.2-12	1
	Page TS / B 3.2-13	2
<b>B 3.3</b>	<b>INSTRUMENTATION</b>	
	Pages TS / B 3.3-1 through TS / B 3.3-4	1
	Page TS / B 3.3-5	2
	Page TS / B 3.3-6	1
	Page TS / B 3.3-7	3
	Page TS / B 3.3-7a	1
	Page TS / B 3.3-8	4
	Pages TS / B 3.3-9 through TS / B 3.3-12	3
	Pages TS / B 3.3-12a	1
	Pages TS / B 3.3-12b and TS / B 3.3-12c	0
	Page TS / B 3.3-13	1
	Page TS / B 3.3-14	3
	Pages TS / B 3.3-15 and TS / B 3.3-16	1
	Pages TS / B 3.3-17 and TS / B 3.3-18	4
	Page TS / B 3.3-19	1
	Pages TS / B 3.3-20 through TS / B 3.3-22	2
	Page TS / B 3.3-22a	0
	Pages TS / B 3.3-23 and TS / B 3.3-24	2
	Pages TS / B 3.3-24a and TS / B 3.3-24b	0
	Page TS / B 3.3-25	3
	Page TS / B 3.3-26	2
	Page TS / B 3.3-27	1
	Pages TS / B 3.3-28 through TS / B 3.3-30	3
	Page TS / B 3.3-30a	0

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS BASES)

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Page TS / B 3.3-31	4
	Page TS / B 3.3-32	5
	Pages TS / B 3.3-32a	0
	Page TS / B 3.3-32b	1
	Page TS / B 3.3-33	5
	Page TS / B 3.3-33a	0
	Page TS / B 3.3-34	1
	Pages TS / B 3.3-35 and TS / B 3.3-36	2
	Pages TS / B 3.3-37 and TS / B 3.3-38	1
	Page TS / B 3.3-39	2
	Pages TS / B 3.3-40 through TS / B 3.3-43	1
	Page TS / B 3.3-44	4
	Pages TS / B 3.3-44a and TS / B 3.3-44b	0
	Page TS / B 3.3-45	3
	Pages TS / B 3.3-45a and TS / B 3.3-45b	0
	Page TS / B 3.3-46	3
	Pages TS / B 3.3-47	2
	Pages TS / B 3.3-48 through TS / B 3.3-51	3
	Pages TS / B 3.3-52 and TS / B 3.3-53	2
	Page TS / B 3.3-53a	0
	Page TS / B 3.3-54	4
	Page TS / B 3.3-55	2
	Pages TS / B 3.3-56 and TS / B 3.3-57	1
	Page TS / B 3.3-58	0
	Page TS / B 3.3-59	1
	Page TS / B 3.3-60	0
	Page TS / B 3.3-61	1
	Pages TS / B 3.3-62 and TS / B 3.3-63	0
	Pages TS / B 3.3-64 and TS / B 3.3-65	2
	Page TS / B 3.3-66	4
	Page TS / B 3.3-67	3
	Page TS / B 3.3-68	4
	Page TS / B 3.3-69	5
	Pages TS / B 3.3-70	4
	Page TS / B 3.3-71	3
	Pages TS / B 3.3-72 and TS / B 3.3-73	2
	Page TS / B 3.3-74	3
	Page TS / B 3.3-75	2
	Page TS / B 3.3-75a	6
	Page TS / B 3.3-75b	7
	Page TS / B 3.3-75c	5

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS BASES)

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages B 3.3-76 through 3.3-77	0
	Page TS / B 3.3-78	1
	Pages B 3.3-79 through B 3.3-81	0
	Page B 3.3-82	1
	Page B 3.3-83	0
	Pages B 3.3-84 and B 3.3-85	1
	Page B 3.3-86	0
	Page B 3.3-87	1
	Page B 3.3-88	0
	Page B 3.3-89	1
	Page TS / B 3.3-90	1
	Page B 3.3-91	0
	Pages TS / B 3.3-92 through TS / B 3.3-100	1
	Pages TS / B 3.3-101 through TS / B 3.3-103	0
	Page TS / B 3.3-104	2
	Pages TS / B 3.3-105 and TS / B 3.3-106	0
	Page TS / B 3.3-107	1
	Page TS / B 3.3-108	0
	Page TS / B 3.3-109	1
	Pages TS / B 3.3-110 and TS / B 3.3-111	0
	Pages TS / B 3.3-112 and TS / B 3.3-112a	1
	Pages TS / B 3.3-113 through TS / B 3.3-115	1
	Page TS / B 3.3-116	3
	Page TS / B 3.3-117	1
	Pages TS / B 3.3-118 through TS / B 3.3-122	0
	Pages TS / B 3.3-123 and TS / B 3.3-124	1
	Page TS / B 3.3-124a	0
	Page TS / B 3.3-125	0
	Pages TS / B 3.3-126 and TS / B 3.3-127	1
	Pages TS / B 3.3-128 through TS/ B 3.3-130	0
	Page TS / B 3.3-131	1
	Pages TS / B 3.3-132 through TS / B 3.3-134	0
	Pages B 3.3-135 through B 3.3-137	0
	Page TS / B 3.3-138	1
	Pages B 3.3-139 through B 3.3-149	0
	Pages TS / B 3.3-150 and TS / B 3.3-151	1
	Pages TS / B 3.3-152 through TS / B 3.3-154	2
	Page TS / B 3.3-155	1
	Pages TS / B 3.3-156 through TS / B 3.3-158	2
	Pages TS / B 3.3-159 through TS / B 3.3-162	1
	Page TS / B 3.3-163	2
	Pages TS / B 3.3-164 and TS / B 3.3-165	1
	Pages TS / B 3.3-166 and TS / B 3.3-167	2

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages TS / B 3.3-168 and TS / B 3.3-169	1
	Page TS / B 3.3-170	2
	Pages TS / B 3.3-171 through TS / B 3.3-177	1
	Pages TS / B 3.3-178 through TS / B 3.3-179a	2
	Pages TS / B 3.3-179b and TS / B 3.3-179c	0
	Page TS / B 3.3-180	1
	Page TS / B 3.3-181	3
	Page TS / B 3.3-182	1
	Page TS / B 3.3-183	2
	Page TS / B 3.3-184	1
	Page TS / B 3.3-185	4
	Page TS / B 3.3-186	1
	Pages TS / B 3.3-187 and TS / B 3.3-188	2
	Pages TS / B 3.3-189 through TS / B 3.3-191	1
	Page TS / B 3.3-192	0
	Page TS / B 3.3-193	1
	Pages TS / B 3.3-194 and TS / B 3.3-195	0
	Page TS / B 3.3-196	2
	Pages TS / B 3.3-197 through TS / B 3.3-204	0
	Page TS / B 3.3-205	1
	Pages B 3.3-206 through B 3.3-209	0
	Page TS / B 3.3-210	1
	Pages B 3.3-211 through B 3.3-219	0
B 3.4	REACTOR COOLANT SYSTEM BASES	
	Pages B 3.4-1 and B 3.4-2	0
	Pages TS / B 3.4-3 and Page TS / B 3.4-4	4
	Page TS / B 3.4-5	3
	Pages TS / B 3.4-6 through TS / B 3.4-9	2
	Page TS / B 3.4-10	1
	Pages TS / 3.4-11 and TS / B 3.4-12	0
	Page TS / B 3.4-13	1
	Page TS / B 3.4-14	0
	Page TS / B 3.4-15	2
	Pages TS / B 3.4-16 and TS / B 3.4-17	4
	Page TS / B 3.4-18	2
	Pages B 3.4-19 through B 3.4-27	0
	Pages TS / B 3.4-28 through TS / B 3.4-30	1
	Page TS / B 3.4-31	0
	Pages TS / B 3.4-32 and TS / B 3.4-33	1
	Page TS / B 3.4-34	0
	Pages TS / B 3.4-35 and TS / B 3.4-36	1
	Page TS / B 3.4-37	2
	Page TS / B 3.4-38	1

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages B 3.4-39 and B 3.4-40	0
	Page TS / B 3.4-41	1
	Pages B 3.4-42 through B 3.4-48	0
	Page TS / B 3.4-49	3
	Page TS / B 3.4-50	1
	Page TS / B 3.4-51	3
	Page TS / B 3.4-52	2
	Page TS / B 3.4-53	1
	Pages TS / B 3.4-54 through TS / B 3.4-56	2
	Page TS / B 3.4-57	3
	Pages TS / B 3.4-58 through TS / B 3.4-60	1
B 3.5	ECCS AND RCIC BASES	
	Pages B 3.5-1 and B 3.5-2	0
	Page TS / B 3.5-3	2
	Page TS / B 3.5-4	1
	Page TS / B 3.5-5	2
	Page TS / B 3.5-6	1
	Pages B 3.5-7 through B 3.5-10	0
	Page TS / B 3.5-11	1
	Page TS / B 3.5-12	0
	Page TS / B 3.5-13	1
	Pages TS / B 3.5-14 and TS / B 3.5-15	0
	Pages TS / B 3.5-16 through TS / B 3.5-18	1
	Pages B 3.5-19 through B 3.5-24	0
	Page TS / B 3.5-25 through TS / B 3.5-27	1
	Page TS / B 3.5-28	0
	Page TS / B 3.5-29	1
	Pages TS / B 3.5-30 and TS / B 3.5-31	0
B 3.6	CONTAINMENT SYSTEMS BASES	
	Page TS / B 3.6-1	2
	Page TS / B 3.6-1a	3
	Page TS / B 3.6-2	4
	Page TS / B 3.6-3	3
	Page TS / B 3.6-4	4
	Pages TS / B 3.6-5 and TS / B 3.6-6	3
	Page TS / B 3.6-6a	2
	Page TS / B 3.6-6b	3
	Page TS / B 3.6-6c	0
	Page B 3.6-7	0
	Page B 3.6-8	1
	Pages B 3.6-9 through B 3.6-14	0
	Page TS / B 3.6-15	2
	Page TS / B 3.6-15a	0
	Page TS / B 3.6-15b	2

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS BASES)

---

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages TS / B 3.6-16 and TS / B 3.6-17	1
	Page TS / B 3.6-17a	0
	Pages TS / B 3.6-18 and TS / B 3.6-19	0
	Page TS / B 3.6-20	1
	Page TS / B 3.6-21	2
	Page TS / B 3.6-22	1
	Page TS / B 3.6-22a	0
	Page TS / B 3.6-23	1
	Pages TS / B 3.6-24 and TS / B 3.6-25	0
	Pages TS / B 3.6-26 and TS / B 3.6-27	2
	Page TS / B 3.6-28	7
	Page TS / B 3.6-29	2
	Page TS / B 3.6-30	1
	Page TS / B 3.6-31	3
	Pages TS / B 3.6-32 and TS / B 3.6-33	1
	Pages TS / B 3.6-34 and TS / B 3.6-35	0
	Page TS / B 3.6-36	1
	Page TS / B 3.6-37	0
	Page TS / B 3.6-38	3
	Page TS / B 3.6-39	2
	Page TS / B 3.6-40	6
	Page B 3.6-41	1
	Pages B 3.6-42 and B 3.6-43	3
	Pages TS / B 3.6-44 and TS / B 3.6-45	1
	Page TS / B 3.6-46	2
	Pages TS / B 3.6-47 through TS / B 3.6-51	1
	Page TS / B 3.6-52	2
	Pages TS / B 3.6-53 through TS / B 3.6-56	0
	Page TS / B 3.6-57	1
	Page TS / 3.6-58	2
	Pages B 3.6-59 through B 3.6-63	0
	Pages TS / B 3.6-64 and TS / B 3.6-65	1
	Pages B 3.6-66 through B 3.6-69	0
	Pages TS / B 3.6-70 through TS / B 3.6-72	1
	Page TS / B 3.6-73	2
	Pages TS / B 3.6-74 and TS / B 3.6-75	1
	Pages B 3.6-76 and B 3.6-77	0
	Page TS / B 3.6-78	1
	Pages B 3.6-79 through B 3.3.6-83	0
	Page TS / B 3.6-84	3
	Page TS / B 3.6-85	2
	Page TS / B 3.6-86	4

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS BASES)**

<u>Section</u>	<u>Title</u>	<u>Revision</u>
	Pages TS / B 3.6-87 through TS / B 3.6-88a	2
	Page TS / B 3.6-89	4
	Page TS / B 3.6-90	2
	Page TS / B 3.6-91	3
	Pages TS / B 3.6-92 through TS / B 3.6-96	1
	Page TS / B 3.6-97	2
	Pages TS / B 3.6-98 and TS / B 3.6-99	1
	Page TS / B 3.6-100	3
	Page TS / B 3.6-100a	0
	Pages TS / B 3.6-101 and TS / B 3.6-102	1
	Pages TS / B 3.6-103 and TS / B 3.6-104	2
	Page TS / B 3.6-105	3
	Page TS / B 3.6-106	2
	Page TS / B 3.6-107	3
B 3.7	PLANT SYSTEMS BASES	
	Pages TS / B 3.7-1	3
	Page TS / B 3.7-2	4
	Pages TS / B 3.7-3 through TS / B 3.7-5	3
	Page TS / B 3.7-5a	1
	Page TS / B 3.7-6	3
	Page TS / B 3.7-6a	2
	Page TS / B 3.7-6b	1
	Page TS / B 3.7-6c	2
	Page TS / B 3.7-7	3
	Page TS / B 3.7-8	2
	Pages TS / B 3.7-9 through TS / B 3.7-11	1
	Pages TS / B 3.7-12 and TS / B 3.7-13	2
	Pages TS / B 3.7-14 through TS / B 3.7-18	3
	Page TS / B 3.7-18a	1
	Pages TS / B 3.7-18b through TS / B 3.7-18e	0
	Pages TS / B 3.7-19 through TS / B 3.7-23	1
	Page TS / B 3.7-24	1
	Pages TS / B 3.7-25 and TS / B 3.7-26	0
	Pages TS / B 3.7-27 through TS / B 3.7-29	5
	Page TS / B 3.7-30	2
	Page TS / B 3.7-31	1
	Page TS / B 3.7-32	0
	Page TS / B 3.7-33	1
	Pages TS / B 3.7-34 through TS / B 3.7-37	0



SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS BASES)

<u>Section</u>	<u>Title</u>	<u>Revision</u>
B 3.8	ELECTRICAL POWER SYSTEMS BASES	
	Page TS / B 3.8-1	3
	Pages TS / B 3.8-2 and TS / B 3.8-3	2
	Page TS / B 3.8-4	3
	Pages TS / B 3.8-4a and TS / B 3.8-4b	0
	Page TS / B 3.8-5	5
	Page TS / B 3.8-6	3
	Pages TS / B 3.8-7 through TS/B 3.8-8	2
	Page TS / B 3.8-9	4
	Page TS / B 3.8-10	3
	Pages TS / B 3.8-11 and TS / B 3.8-17	2
	Page TS / B 3.8-18	3
	Pages TS / B 3.8-19 through TS / B 3.8-21	2
	Pages TS / B 3.8-22 and TS / B 3.8-23	3
	Pages TS / B 3.8-24 through TS / B 3.8-37	2
	Pages B 3.8-38 through B 3.8-44	0
	Page TS / B 3.8-45	1
	Pages TS / B 3.8-46 through TS / B 3.8-48	0
	Pages TS / B 3.8-49 through TS / B 3.8-51	1
	Page TS / B 3.8-52	0
	Page TS / B 3.8-53	1
	Pages TS / B 3.8-54 through TS / B 3.8-57	2
	Pages TS / B 3.8-58 through TS / B 3.8-61	3
	Pages TS / B 3.8-62 and TS / B 3.8-63	5
	Page TS / B 3.8-64	4
	Page TS / B 3.8-65	5
	Pages TS / B 3.8-66 through TS / B 3.8-77	1
	Pages TS / B 3.8-77A through TS / B 3.8-77C	0
	Pages B 3.8-78 through B 3.8-80	0
	Page TS / B 3.8-81	1
	Pages B 3.8-82 through B 3.8-90	0
B 3.9	REFUELING OPERATIONS BASES	
	Pages TS / B 3.9-1 and TS / B 3.9-1a	1
	Pages TS / B 3.9-2 through TS / B 3.9-5	1
	Pages TS / B 3.9-6 through TS / B 3.9-8	0
	Pages B 3.9-9 through B 3.9-18	0
	Pages TS / B 3.9-19 through TS / B 3.9-21	1
	Pages B 3.9-22 through B 3.9-30	0

SUSQUEHANNA STEAM ELECTRIC STATION  
***LIST OF EFFECTIVE SECTIONS*** (TECHNICAL SPECIFICATIONS BASES)

---

<u>Section</u>	<u>Title</u>	<u>Revision</u>
B 3.10	SPECIAL OPERATIONS BASES	
	Page TS / B 3.10-1	2
	Pages TS / B 3.10-2 through TS / B 3.10-5	1
	Pages B 3.10-6 through B 3.10-31	0
	Page TS / B 3.10-32	2
	Page B 3.10-33	0
	Page TS / B 3.10-34	1
	Pages B 3.10-35 and B 3.10-36	0
	Page TS / B 3.10-37	1
	Page TS / B 3.10-38	2

TSB1 Text LOES.doc  
1/10/2012

B 3.4 REACTOR COOLANT SYSTEM (RCS)

B 3.4.3 Safety/Relief Valves (S/RVs)

BASES

---

**BACKGROUND** The ASME Boiler and Pressure Vessel Code requires the reactor pressure vessel be protected from overpressure during upset conditions by self-actuated safety valves. As part of the nuclear pressure relief system, the size and number of S/RVs are selected such that peak pressure in the nuclear system will not exceed the ASME Code limits for the reactor coolant pressure boundary (RCPB).

The S/RVs are located on the main steam lines between the reactor vessel and the first isolation valve within the drywell. There are a total of 16 S/RVs of which any 14 are required to be OPERABLE. The S/RVs can actuate by either of two modes: the safety mode or the relief mode. In the safety mode (or spring mode of operation), the valve opens when steam pressure at the valve inlet overcomes the spring force holding the valve closed. This satisfies the Code requirement.

Each S/RV discharges steam through a discharge line to a point below the minimum water level in the suppression pool. Six S/RVs also serve as the Automatic Depressurization System (ADS) valves. The ADS requirements are specified in LCO 3.5.1, "ECCS-Operating."

---

**APPLICABLE  
SAFETY  
ANALYSES**

The overpressure protection system must accommodate the most severe pressurization transient. Evaluations have determined that the most severe transient is the closure of all main steam isolation valves (MSIVs), followed by reactor scram on high neutron flux (i.e., failure of the direct scram associated with MSIV position) (Ref. 1). For the purpose of the analyses, 14 of the 16 S/RVs are assumed to operate in the safety mode. The analysis results demonstrate that the design S/RV capacity is capable of maintaining reactor pressure below the ASME Code limit of 110% of vessel design pressure (110% x 1250 psig = 1375 psig). This LCO helps to ensure that the acceptance limit of 1375 psig is met during the Design Basis Event.

(continued)

---

BASES

---

APPLICABLE  
SAFETY  
ANALYSES  
(continued)

From an overpressure standpoint, the design basis events are bounded by the MSIV closure with flux scram event described above. Reference 2 discusses additional events that are expected to actuate the S/RVs.

S/RVs satisfy Criterion 3 of the NRC Policy Statement (Ref. 4).

---

LCO

The safety function of 14 of the 16 S/RVs are required to be OPERABLE to satisfy the assumptions of the safety analysis (Refs. 1 and 2). The requirements of this LCO are applicable only to the capability of the S/RVs to mechanically open to relieve excess pressure when the lift setpoint is exceeded (safety function).

The S/RV setpoints are established to ensure that the ASME Code limit on peak reactor pressure is satisfied. The ASME Code specifications require the lowest safety valve setpoint to be at or below vessel design pressure (1250 psig) and the highest safety valve to be set so that the total accumulated pressure does not exceed 110% of the design pressure for overpressurization conditions. The transient evaluations in the FSAR are based on these setpoints, but also include the additional uncertainty of + 3%, - 5% of the nominal setpoint to provide an added degree of conservatism.

Operation with fewer valves OPERABLE than specified, or with setpoints outside the ASME limits, could result in a more severe reactor response to a transient than predicted, possibly resulting in the ASME Code limit on reactor pressure being exceeded.

---

APPLICABILITY

In MODES 1, 2, and 3, all required S/RVs must be OPERABLE, since considerable energy may be in the reactor core and the limiting design basis transients are assumed to occur in these MODES. The S/RVs may be required to provide pressure relief to discharge energy from the core until such time that the Residual Heat Removal (RHR) System is capable of dissipating the core heat.

In MODE 4 reactor pressure is low enough that the overpressure limit is unlikely to be approached by assumed

(continued)

BASES

---

APPLICABILITY (continued) operational transients or accidents. In MODE 5, the reactor vessel head is unbolted or removed and the reactor is at atmospheric pressure. The S/RV function is not needed during these conditions.

---

ACTIONS A.1 and A.2

With less than the minimum number of required S/RVs OPERABLE, a transient may result in the violation of the ASME Code limit on reactor pressure. If the safety function of one or more required S/RVs is inoperable, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

---

SURVEILLANCE REQUIREMENT SR 3.4.3.1

The Surveillance requires that the required S/RVs will open at the pressures assumed in the safety analysis of Reference 1. The demonstration of the S/RV safe lift settings must be performed during shutdown, since this is a bench test, to be done in accordance with the Inservice Testing Program. The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures. The S/RV setpoint is + 3%, - 5% of the nominal setpoint for OPERABILITY. Requirements for accelerated testing are established in accordance with the Inservice Test Program. Any of the 16 S/RVs, identified in this Surveillance Requirement, with their associated setpoints, can be designated as the 14 required S/RVs. This maintains the assumptions in the overpressure analysis.

A Note is provided to allow up to two of the required 14 S/RVs to be physically replaced with S/RVs with lower setpoints until the next refueling outage. This provides operational flexibility which maintains the assumptions in the over-pressure analysis.

(continued)

BASES

---

SURVEILLANCE REQUIREMENTS SR 3.4.3.1 (continued)

The Frequency of this Surveillance is established in accordance with the Inservice Testing Program.

---

REFERENCES

1. FSAR, Section 5.2.2.1.4.
  2. FSAR, Section 15.
  3. ASME Operation and Maintenance Code.
  4. Final Policy Statement on Technical Specifications Improvements, July 22, 1993 (58 FR 39132).
-

MANUAL HARD COPY DISTRIBUTION  
DOCUMENT TRANSMITTAL 2012-2515

---

USER INFORMATION:

GERLACH\*ROSE M                    EMPL#: 028401    CA#: 0363

Address: NUCSA2

Phone#: 254-3194

TRANSMITTAL INFORMATION:

TO:        GERLACH\*ROSE M            01/16/2012

LOCATION:   NRC REGION 1 TECH SPECS

FROM:     NUCLEAR RECORDS DOCUMENT CONTROL CENTER (NUCSA-2)

THE FOLLOWING CHANGES HAVE OCCURRED TO THE HARDCOPY OR ELECTRONIC MANUAL ASSIGNED TO YOU. HARDCOPY USERS MUST ENSURE THE DOCUMENTS PROVIDED MATCH THE INFORMATION ON THIS TRANSMITTAL. WHEN REPLACING THIS MATERIAL IN YOUR HARDCOPY MANUAL, ENSURE THE UPDATE DOCUMENT ID IS THE SAME DOCUMENT ID YOU'RE REMOVING FROM YOUR MANUAL. TOOLS FROM THE HUMAN PERFORMANCE TOOL BAG SHOULD BE UTILIZED TO ELIMINATE THE CHANCE OF ERRORS.

ATTENTION: "REPLACE" directions do not affect the Table of Contents, Therefore no TOC will be issued with the updated material.

TS2 - PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 2  
MANUAL

REMOVE MANUAL TABLE OF CONTENTS    DATE: 04/20/2011

ADD        MANUAL TABLE OF CONTENTS    DATE: 01/13/2012

CATEGORY: DOCUMENTS TYPE: TS2

ID: TEXT 3.4.3

ADD: REV: 2

REMOVE: REV:1

CATEGORY: DOCUMENTS TYPE: TS2

ID: TEXT LOES

REMOVE: REV:39

ADD: REV: 40

ANY DISCREPANCIES WITH THE MATERIAL PROVIDED, CONTACT DCS @ X3107 OR X3136 FOR ASSISTANCE. UPDATES FOR HARDCOPY MANUALS WILL BE DISTRIBUTED WITHIN 3 DAYS IN ACCORDANCE WITH DEPARTMENT PROCEDURES. PLEASE MAKE ALL CHANGES AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX UPON COMPLETION OF UPDATES. FOR ELECTRONIC MANUAL USERS, ELECTRONICALLY REVIEW THE APPROPRIATE DOCUMENTS AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX.



# SSES MANUAL

Manual Name: TS2

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 2 MANUA

## Table Of Contents

Issue Date: 01/13/2012

<u>Procedure Name</u>	<u>Rev</u>	<u>Issue Date</u>	<u>Change ID</u>	<u>Change Number</u>
TEXT LOES	40	01/13/2012		
<b>Title:</b> LIST OF EFFECTIVE SECTIONS				
TEXT TOC	9	01/23/2008		
<b>Title:</b> TABLE OF CONTENTS				
TEXT 1.1	3	05/06/2009		
<b>Title:</b> USE AND APPLICATION DEFINITIONS				
TEXT 1.2	0	11/14/2002		
<b>Title:</b> USE AND APPLICATION LOGICAL CONNECTORS				
TEXT 1.3	0	11/14/2002		
<b>Title:</b> USE AND APPLICATION COMPLETION TIMES				
TEXT 1.4	1	01/19/2009		
<b>Title:</b> USE AND APPLICATION FREQUENCY				
TEXT 2.0	4	05/06/2009		
<b>Title:</b> SAFETY LIMITS SLS				
TEXT 3.0	2	10/12/2006		
<b>Title:</b> LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY/SURVEILLANCE REQUIREMENT (SR) APPLICABILITY				
TEXT 3.1.1	0	11/14/2002		
<b>Title:</b> REACTIVITY CONTROL SYSTEMS SHUTDOWN MARGIN SDM				
TEXT 3.1.2	0	11/14/2002		
<b>Title:</b> REACTIVITY CONTROL SYSTEMS REACTIVITY ANOMALIES				
TEXT 3.1.3	1	01/19/2009		
<b>Title:</b> REACTIVITY CONTROL SYSTEMS CONTROL ROD OPERABILITY				

## SSES MANUAL

Manual Name: TS2

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 2 MAN

TEXT 3.1.4 2 01/30/2009  
**Title:** REACTIVITY CONTROL SYSTEMS CONTROL ROD SCRAM TIMES

TEXT 3.1.5 0 11/14/2002  
**Title:** REACTIVITY CONTROL SYSTEMS CONTROL ROD SCRAM ACCUMULATORS

TEXT 3.1.6 0 11/14/2002  
**Title:** REACTIVITY CONTROL SYSTEMS ROD PATTERN CONTROL

TEXT 3.1.7 3 10/04/2007  
**Title:** REACTIVITY CONTROL SYSTEMS STANDBY LIQUID CONTROL (SLC) SYSTEM

TEXT 3.1.8 1 10/19/2005  
**Title:** REACTIVITY CONTROL SYSTEMS SCRAM DISCHARGE VOLUME (SDV) VENT AND DRAIN VALVES

TEXT 3.2.1 1 05/06/2009  
**Title:** POWER DISTRIBUTION LIMITS AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)

TEXT 3.2.2 1 05/06/2009  
**Title:** POWER DISTRIBUTION LIMITS MINIMUM CRITICAL POWER RATIO (MCPR)

TEXT 3.2.3 1 05/06/2009  
**Title:** POWER DISTRIBUTION LIMITS LINEAR HEAT GENERATION RATE (LHGR)

TEXT 3.3.1.1 3 05/06/2009  
**Title:** INSTRUMENTATION REACTOR PROTECTION SYSTEM RPS INSTRUMENTATION

TEXT 3.3.1.2 0 11/14/2002  
**Title:** INSTRUMENTATION SOURCE RANGE MONITOR (SRM) INSTRUMENTATION

TEXT 3.3.2.1 1 04/09/2007  
**Title:** INSTRUMENTATION CONTROL ROD BLOCK INSTRUMENTATION

TEXT 3.3.2.2 1 05/06/2009  
**Title:** INSTRUMENTATION FEEDWATER - MAIN TURBINE HIGH WATER LEVEL TRIP INSTRUMENTATION



## SSES MANUAL

Manual Name: TS2

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 2 MAN

TEXT 3.4.2	1	05/06/2009	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) JET PUMPS
TEXT 3.4.3	2	01/13/2012	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) SAFETY/RELIEF VALVES (S/RVS)
TEXT 3.4.4	0	11/14/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS OPERATIONAL LEAKAGE
TEXT 3.4.5	0	11/14/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS PRESSURE ISOLATION VALVE (PIV) LEAKAGE
TEXT 3.4.6	1	04/18/2005	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS LEAKAGE DETECTION INSTRUMENTATION
TEXT 3.4.7	1	04/18/2005	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS SPECIFIC ACTIVITY
TEXT 3.4.8	1	04/18/2005	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RESIDUAL HEAT REMOVAL (RHR) SHUTDOWN COOLING SYSTEM - HOT SHUTDOWN
TEXT 3.4.9	0	11/14/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RESIDUAL HEAT REMOVAL (RHR) SHUTDOWN COOLING SYSTEM - COLD SHUTDOWN
TEXT 3.4.10	3	05/06/2009	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS PRESSURE AND TEMPERATURE (P/T) LIMITS
TEXT 3.4.11	0	11/14/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) REACTOR STEAM DOME PRESSURE
TEXT 3.5.1	1	04/18/2005	<b>Title:</b> EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM ECCS - OPERATING
TEXT 3.5.2	0	11/14/2002	<b>Title:</b> EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM ECCS - SHUTDOWN

## SSES MANUAL

Manual Name: TS2

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 2 MANUA

TEXT 3.5.3	1	04/18/2005	<b>Title:</b> EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM RCIC SYSTEM
TEXT 3.6.1.1	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT
TEXT 3.6.1.2	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT AIR LOCK
TEXT 3.6.1.3	2	05/06/2009	<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT ISOLATION VALVES (PCIVS)
TEXT 3.6.1.4	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS CONTAINMENT PRESSURE
TEXT 3.6.1.5	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS DRYWELL AIR TEMPERATURE
TEXT 3.6.1.6	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS SUPPRESSION CHAMBER-TO-DRYWELL VACUUM BREAKERS
TEXT 3.6.2.1	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS SUPPRESSION POOL AVERAGE TEMPERATURE
TEXT 3.6.2.2	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS SUPPRESSION POOL WATER LEVEL
TEXT 3.6.2.3	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS RESIDUAL HEAT REMOVAL (RHR) SUPPRESSION POOL COOLING
TEXT 3.6.2.4	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS RESIDUAL HEAT REMOVAL (RHR) SUPPRESSION POOL SPRAY
TEXT 3.6.3.1	2	06/13/2006	<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT HYDROGEN RECOMBINERS

## SSES MANUAL

Manual Name: TS2

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 2 MAN

TEXT 3.6.3.2	1	04/18/2005	<b>Title:</b> CONTAINMENT SYSTEMS DRYWELL AIR FLOW SYSTEM
TEXT 3.6.3.3	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS PRIMARY CONTAINMENT OXYGEN CONCENTRATION
TEXT 3.6.4.1	3	03/16/2006	<b>Title:</b> CONTAINMENT SYSTEMS SECONDARY CONTAINMENT
TEXT 3.6.4.2	0	11/14/2002	<b>Title:</b> CONTAINMENT SYSTEMS SECONDARY CONTAINMENT ISOLATION VALVES (SCIVS)
TEXT 3.6.4.3	1	10/24/2005	<b>Title:</b> CONTAINMENT SYSTEMS STANDBY GAS TREATMENT (SGT) SYSTEM
TEXT 3.7.1	1	05/02/2008	<b>Title:</b> PLANT SYSTEMS RESIDUAL HEAT REMOVAL SERVICE WATER (RHRSW) SYSTEM AND THE ULTIMATE HEAT SINK (UHS)
TEXT 3.7.2	0	11/14/2002	<b>Title:</b> PLANT SYSTEMS EMERGENCY SERVICE WATER (ESW) SYSTEM
TEXT 3.7.3	1	01/08/2010	<b>Title:</b> PLANT SYSTEMS CONTROL ROOM EMERGENCY OUTSIDE AIR SUPPLY (CREOAS) SYSTEM
TEXT 3.7.4	0	11/14/2002	<b>Title:</b> PLANT SYSTEMS CONTROL ROOM FLOOR COOLING SYSTEM
TEXT 3.7.5	0	11/14/2002	<b>Title:</b> PLANT SYSTEMS MAIN CONDENSER OFFGAS
TEXT 3.7.6	2	05/06/2009	<b>Title:</b> PLANT SYSTEMS MAIN TURBINE BYPASS SYSTEM
TEXT 3.7.7	0	11/14/2002	<b>Title:</b> PLANT SYSTEMS SPENT FUEL STORAGE POOL WATER LEVEL

## SSES MANUAL

Manual Name: TS2

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 2 MANUA

TEXT 3.7.8	0	05/06/2009
<b>Title:</b> MAIN TURBINE PRESSURE REGULATION SYSTEM		
TEXT 3.8.1	4	02/28/2008
<b>Title:</b> ELECTRICAL POWER SYSTEMS AC SOURCES - OPERATING		
TEXT 3.8.2	1	10/05/2005
<b>Title:</b> ELECTRICAL POWER SYSTEMS AC SOURCES - SHUTDOWN		
TEXT 3.8.3	0	11/14/2002
<b>Title:</b> ELECTRICAL POWER SYSTEMS DIESEL FUEL OIL, LUBE OIL, AND STARTING AIR		
TEXT 3.8.4	3	01/19/2009
<b>Title:</b> ELECTRICAL POWER SYSTEMS DC SOURCES - OPERATING		
TEXT 3.8.5	1	12/14/2006
<b>Title:</b> ELECTRICAL POWER SYSTEMS DC SOURCES - SHUTDOWN		
TEXT 3.8.6	1	12/14/2006
<b>Title:</b> ELECTRICAL POWER SYSTEMS BATTERY CELL PARAMETERS		
TEXT 3.8.7	2	03/31/2006
<b>Title:</b> ELECTRICAL POWER SYSTEMS DISTRIBUTION SYSTEMS - OPERATING		
TEXT 3.8.8	0	11/14/2002
<b>Title:</b> ELECTRICAL POWER SYSTEMS DISTRIBUTION SYSTEMS - SHUTDOWN		
TEXT 3.9.1	0	11/14/2002
<b>Title:</b> REFUELING OPERATIONS REFUELING EQUIPMENT INTERLOCKS		
TEXT 3.9.2	0	11/14/2002
<b>Title:</b> REFUELING OPERATIONS REFUEL POSITION ONE-ROD-OUT INTERLOCK		
TEXT 3.9.3	0	11/14/2002
<b>Title:</b> REFUELING OPERATIONS CONTROL ROD POSITION		

## SSES MANUAL

Manual Name: TS2

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 2 MANUAL

TEXT 3.9.4 0 11/14/2002  
**Title:** REFUELING OPERATIONS CONTROL ROD POSITION INDICATION

TEXT 3.9.5 0 11/14/2002  
**Title:** REFUELING OPERATIONS CONTROL ROD OPERABILITY - REFUELING

TEXT 3.9.6 0 11/14/2002  
**Title:** REFUELING OPERATIONS REACTOR PRESSURE VESSEL (RPV) WATER LEVEL

TEXT 3.9.7 0 11/14/2002  
**Title:** REFUELING OPERATIONS RESIDUAL HEAT REMOVAL (RHR) - HIGH WATER LEVEL

TEXT 3.9.8 0 11/14/2002  
**Title:** REFUELING OPERATIONS RESIDUAL HEAT REMOVAL (RHR) - LOW WATER LEVEL

TEXT 3.10.1 1 01/23/2008  
**Title:** SPECIAL OPERATIONS INSERVICE LEAK AND HYDROSTATIC TESTING OPERATION

TEXT 3.10.2 0 11/14/2002  
**Title:** SPECIAL OPERATIONS REACTOR MODE SWITCH INTERLOCK TESTING

TEXT 3.10.3 0 11/14/2002  
**Title:** SPECIAL OPERATIONS SINGLE CONTROL ROD WITHDRAWAL - HOT SHUTDOWN

TEXT 3.10.4 0 11/14/2002  
**Title:** SPECIAL OPERATIONS SINGLE CONTROL ROD WITHDRAWAL - COLD SHUTDOWN

TEXT 3.10.5 0 11/14/2002  
**Title:** SPECIAL OPERATIONS SINGLE CONTROL ROD DRIVE (CRD) REMOVAL - REFUELING

TEXT 3.10.6 0 11/14/2002  
**Title:** SPECIAL OPERATIONS MULTIPLE CONTROL ROD WITHDRAWAL - REFUELING

TEXT 3.10.7 0 11/14/2002  
**Title:** SPECIAL OPERATIONS CONTROL ROD TESTING - OPERATING



## SSES MANUAL

**Manual Name:** TS2

**Manual Title:** PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 2 MANUA

TEXT 3.10.8	2	12/15/2009
<b>Title:</b> SPECIAL OPERATIONS SHUTDOWN MARGIN (SDM) TEST - REFUELING		
TEXT 4.0	1	05/24/2007
<b>Title:</b> DESIGN FEATURES		
TEXT 5.1	0	11/14/2002
<b>Title:</b> ADMINISTRATIVE CONTROLS RESPONSIBILITY		
TEXT 5.2	1	10/09/2009
<b>Title:</b> ADMINISTRATIVE CONTROLS ORGANIZATION		
TEXT 5.3	0	11/14/2002
<b>Title:</b> ADMINISTRATIVE CONTROLS UNIT STAFF QUALIFICATIONS		
TEXT 5.4	0	11/14/2002
<b>Title:</b> ADMINISTRATIVE CONTROLS PROCEDURES		
TEXT 5.5	5	01/08/2010
<b>Title:</b> ADMINISTRATIVE CONTROLS PROGRAMS AND MANUALS		
TEXT 5.6	7	05/06/2009
<b>Title:</b> ADMINISTRATIVE CONTROLS REPORTING REQUIREMENTS		
TEXT 5.7	0	11/14/2002
<b>Title:</b> ADMINISTRATIVE CONTROLS HIGH RADIATION AREA		
TEXT APPENDIX B	0	11/14/2002
<b>Title:</b> ENVIRONMENTAL PROTECTION PLAN NON-RADIOLOGICAL		

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS)

PPL Rev. 40

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
TOC	Table of Contents	
	TS/TOC-1	223
	TS/TOC-2	211
	TS/TOC-3	223
	TS/TOC-4	210
1.0	USE AND APPLICATION	
1.1	Definitions	
	Page 1.1-1	151
	Pages 1.1-2 and 1.1-3	216
	Page 1.1-4	151
	Page 1.1-5	220
	Page 1.1-6	224
	Pages 1.1-7 and 1.1-8	151
1.2	Logical Connectors	
	Pages 1.2-1 through 1.2-3	151
1.3	Completion Times	
	Pages 1.3-1 through 1.3-13	151
1.4	Frequency	
	Pages 1.4-1 through 1.4-3	151
	Pages TS / 1.4-4 and TS / 1.4-5	229
2.0	SAFETY LIMITS (SLs)	
	Page TS / 2.0-1	230
	Pages TS / 2.0-2 and 2.0-3	154
3.0	LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY/ SURVEILLANCE REQUIREMENT (SR) APPLICABILITY	
	Page TS / 3.0-1	213
	Page TS / 3.0-2	195
	Page TS / 3.0-3	213
	Page TS / 3.0-4	179
	Page TS / 3.0-5	195
3.1	REACTIVITY CONTROL SYSTEMS	
	Pages 3.1-1 through 3.1-7	151
	Page TS 3.1-8	229
	Page 3.1-9	151
	Page TS 3.1-10	229
	Page 3.1-11	151

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS)**

PPL Rev. 40

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
	Page TS / 3.1-12	214
	Page TS / 3.1-13	228
	Pages 3.1-14 through 3.1-19	151
	Pages 3.1-20 and 3.1-21	217
	Page TS / 3.1-22	217
	Page 3.1-23	217
	Page 3.1-24	151
	Page TS / 3.1-25	199
	Page 3.1-26	151
3.2	<b>POWER DISTRIBUTION LIMITS</b> Pages 3.2-1 through 3.2-6	224
3.3	<b>INSTRUMENTATION</b>	
	Page 3.3-1	207
	Pages 3.3-2 through 3.3-6	224
	Pages TS / 3.3-7 and TS / 3.3-8	224
	Page 3.3-9	224
	Pages 3.3-10 through 3.3-15	151
	Page 3.3-16	220
	Page 3.3-17	151
	Page TS / 3.3-18	220
	Page 3.3-19	151
	Page TS / 3.3-20	220
	Page 3.3-21	224
	Page 3.3-22	151
	Page TS / 3.3-23	195
	Page 3.3-24	151
	Pages TS / 3.3-25 and TS / 3.3-26	211
	Page TS / 3.3-27	195
	Pages 3.3-28 and 3.3-29	151
	Pages 3.3-30 through 3.3-32	224
	Pages TS / 3.3-37 through TS / 3.3-41	155
	Page TS / 3.3-42	202
	Pages TS / 3.3-43 and TS / 3.3-44	155
	Page TS / 3.3-45	234
	Pages TS / 3.3-46 and TS / 3.3-47	196

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS)**

PPL Rev. 40

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
	Pages 3.3-48 through 3.3-51	151
	Page TS / 3.3-52	188
	Pages 3.3-53 through 3.3-55	151
	Page TS / 3.3-56	166
	Page TS / 3.3-57	224
	Pages 3.3-58 through 3.3-60	151
	Page 3.3-61	216
	Page TS / 3.3-62	188
	Pages 3.3-63 through 3.3-71	151
	Pages TS / 3.3-72 through TS / 3.3-74	208
	Pages 3.3-75 through 3.3-77	151
3.4	<b>REACTOR COOLANT SYSTEM (RCS)</b>	
	Page TS / 3.4-1	207
	Pages TS / 3.4-2 through TS / 3.4-5	192
	Page 3.4-6	151
	Pages 3.4-7 and 3.4-8	224
	Page TS / 3.4-9	237
	Pages 3.4-10 through 3.4-13	151
	Pages TS / 3.4-14 and TS / 3.4-15	195
	Page 3.4-16	151
	Page TS / 3.4-17	195
	Page 3.4-18	151
	Page TS / 3.4-19	195
	Pages 3.4-20 through 3.4-25	151
	Page TS / 3.4-26	174
	Pages 3.4-27 and 3.4-28	224
	Page 3.4-29	151
	Pages TS / 3.4-30 through TS / 3.4-30b	209
	Page 3.4-31	151
3.5	<b>EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM</b>	
	Page TS / 3.5-1	195
	Pages 3.5-2 through 3.5-11	151
	Page TS / 3.5-12	195
	Pages 3.5-13 and 3.5-14	151

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS)**

PPL Rev. 40

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
3.6	CONTAINMENT SYSTEMS	
	Page 3.6-1	151
	Page TS / 3.6-2	171
	Pages 3.6-3 through 3.6-7	151
	Page TS / 3.6-8	170
	Page 3.6-9	151
	Pages TS / 3.6-10 and TS / 3.6-11	170
	Pages 3.6-12 and 3.6-13	151
	Page TS / 3.6-14	200
	Page TS / 3.6-15	231
	Pages 3.6-16 through 3.6-20	151
	Page TS / 3.6-21	173
	Pages 3.6-22 through 3.6-25	151
	Page TS / 3.6-26	181
	Pages 3.6-27 through 3.6-29	151
	Pages TS / 3.6-30 and TS / 3.6-31	211
	Page TS / 3.6-32	195
	Pages 3.6-33 and 3.6-34	151
	Pages TS / 3.6-35 and TS / 3.6-36	203
	Page TS / 3.6-37	205
	Pages 3.6-38 through 3.6-42	151
	Pages TS / 3.6-43 and TS / 3.6-44	203
3.7	PLANT SYSTEMS	
	Page TS / 3.7-1	224
	Page TS / 3.7-2	180
	Page TS / 3.7-3	224
	Pages TS / 3.7-3a through TS / 3.7-3d	224
	Pages 3.7-4 and 3.7-5	151
	Pages TS / 3.7-6 through TS / 3.7-9	232
	Pages 3.7-10 through 3.7-14	151
	Page TS / 3.7-15	224
	Page TS / 3.7-16	193
	Page 3.7-17	151
	Pages TS / 3.7-18 and TS / 3.7-19	224
3.8	ELECTRICAL POWER SYSTEMS	
	Page TS / 3.8-1	225
	Page TS / 3.8-2	202
	Pages 3.8-3 through 3.8-7	151
	Page TS / 3.8-8	159

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS)

PPL Rev. 40

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
	Pages 3.8-9 through 3.8-18	151
	Page TS / 3.8-19	202
	Pages 3.8-20 through 3.8-22	151
	Page TS / 3.8-23	157
	Page TS / 3.8-24	151
	Page TS / 3.8-25	157
	Pages TS / 3.8-26 and TS / 3.8-26a	227
	Page TS / 3.8-27	227
	Pages TS / 3.8-28 and TS / 3.8-29	215
	Page TS / 3.8-30	227
	Pages TS / 3.8-31 through TS / 3.8-33	215
	Pages 3.8-34 through 3.8-37	151
	Pages TS / 3.8-38 through TS / 3.8-43	215
	Pages TS / 3.8-44 through TS / 3.8-46	208
	Pages 3.8-47 through 3.8-53	151
3.9	REFUELING OPERATIONS	
	Pages 3.9-1 through 3.9-15	151
3.10	SPECIAL OPERATIONS	
	Page TS / 3.10-1	223
	Pages 3.10-2 through 3.10-19	151
	Page TS / 3.10-20	234
	Page TS / 3.10-21	207
	Pages 3.10-22 and 3.10-23	151
4.0	DESIGN FEATURES	
	Page TS / 4.0-1	184
	Pages 4.0-2 and 4.0-3	151
	Page TS / 4.0-4	221
5.0	ADMINISTRATIVE CONTROLS	
	Pages 5.0-1 and 5.0-2	151
	Pages TS / 5.0-3 and TS / 5.0-4	233
	Pages 5.0-5 through 5.0-7	151
	Page TS / 5.0-8	188
	Page TS / 5.0-9	183
	Page 5.0-10	151
	Page TS / 5.0-11	219
	Pages 5.0-12 and 5.0-13	151

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS)

PPL Rev. 40

---

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
	Page TS / 5.0-14	186
	Page 5.0-15	151
	Pages TS / 5.0-16 and TS / 5.0-17	183
	Page TS / 5.0-18	224
	Page TS / 5.0-18a	219
	Pages TS / 5.0-18b and TS / 5.0-18c	232
	Page TS / 5.0-19	210
	Page TS / 5.0-20	183
	Pages TS / 5.0-21 through TS / 5.0-23	224
	Page TS / 5.0-23a	194
	Pages TS / 5.0-24 through TS / 5.0-27	184
Appendix B	Environmental Protection Plan	162

TS2 Text LOES  
01/10/2012

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.3 Safety/Relief Valves (S/RVs)

LCO 3.4.3 The safety function of 14 S/RVs shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A.1 One or more required S/RVs inoperable.	A.1 Be in MODE 3.	12 hours
	<u>AND</u>	
	A.2 Be in MODE 4.	36 hours



SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY								
SR 3.4.3.1	<p>Verify the safety function lift setpoints of the required S/RVs are as follows:</p> <p>-----NOTE-----</p> <p>Up to two inoperable required S/RVs may be replaced with spare OPERABLE S/RVs having lower setpoints until the next refueling outage.</p> <p>-----</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>Number of S/RVs</u></th> <th style="text-align: center;"><u>Setpoint (psig)</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">1175 (<math>\geq 1117</math> and <math>\leq 1210</math>)</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">1195 (<math>\geq 1136</math> and <math>\leq 1230</math>)</td> </tr> <tr> <td style="text-align: center;">8</td> <td style="text-align: center;">1205 (<math>\geq 1145</math> and <math>\leq 1241</math>)</td> </tr> </tbody> </table> <p>Following testing, lift settings shall be within <math>\pm 1\%</math>.</p>	<u>Number of S/RVs</u>	<u>Setpoint (psig)</u>	2	1175 ( $\geq 1117$ and $\leq 1210$ )	6	1195 ( $\geq 1136$ and $\leq 1230$ )	8	1205 ( $\geq 1145$ and $\leq 1241$ )	In accordance with the Inservice Testing Program
<u>Number of S/RVs</u>	<u>Setpoint (psig)</u>									
2	1175 ( $\geq 1117$ and $\leq 1210$ )									
6	1195 ( $\geq 1136$ and $\leq 1230$ )									
8	1205 ( $\geq 1145$ and $\leq 1241$ )									

MANUAL HARD COPY DISTRIBUTION  
DOCUMENT TRANSMITTAL 2012-2337

---

USER INFORMATION:

GERLACH\*ROSE M                    EMPL#:028401    CA#: 0363

Address: NUCSA2

Phone#: 254-3194

TRANSMITTAL INFORMATION:

TO:        GERLACH\*ROSE M            01/16/2012

LOCATION:   NRC REGION 1 TECH SPECS

FROM:      NUCLEAR RECORDS DOCUMENT CONTROL CENTER (NUCSA-2)

THE FOLLOWING CHANGES HAVE OCCURRED TO THE HARDCOPY OR ELECTRONIC MANUAL ASSIGNED TO YOU. HARDCOPY USERS MUST ENSURE THE DOCUMENTS PROVIDED MATCH THE INFORMATION ON THIS TRANSMITTAL. WHEN REPLACING THIS MATERIAL IN YOUR HARDCOPY MANUAL, ENSURE THE UPDATE DOCUMENT ID IS THE SAME DOCUMENT ID YOU'RE REMOVING FROM YOUR MANUAL. TOOLS FROM THE HUMAN PERFORMANCE TOOL BAG SHOULD BE UTILIZED TO ELIMINATE THE CHANCE OF ERRORS.

ATTENTION: "REPLACE" directions do not affect the Table of Contents, Therefore no TOC will be issued with the updated material.

TS1 - PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 1  
MANUAL

REMOVE MANUAL TABLE OF CONTENTS    DATE: 04/20/2011

ADD        MANUAL TABLE OF CONTENTS    DATE: 01/13/2012

CATEGORY: DOCUMENTS TYPE: TS1

ID: TEXT 3.4.3

REMOVE: REV:1

ADD: REV: 2

CATEGORY: DOCUMENTS TYPE: TS1

ID: TEXT LOES

REMOVE: REV:35

ADD: REV: 36

ANY DISCREPANCIES WITH THE MATERIAL PROVIDED, CONTACT DCS @ X3107 OR X3136 FOR ASSISTANCE. UPDATES FOR HARDCOPY MANUALS WILL BE DISTRIBUTED WITHIN 3 DAYS IN ACCORDANCE WITH DEPARTMENT PROCEDURES. PLEASE MAKE ALL CHANGES AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX UPON COMPLETION OF UPDATES. FOR ELECTRONIC MANUAL USERS, ELECTRONICALLY REVIEW THE APPROPRIATE DOCUMENTS AND ACKNOWLEDGE COMPLETE IN YOUR NIMS INBOX.

# SSES MANUAL

Manual Name: TS1

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 1 MANUAL

## Table Of Contents

Issue Date: 01/13/2012

<u>Procedure Name</u>	<u>Rev</u>	<u>Issue Date</u>	<u>Change ID</u>	<u>Change Number</u>
TEXT LOES <b>Title:</b> LIST OF EFFECTIVE SECTIONS	36	01/13/2012		
TEXT TOC <b>Title:</b> TABLE OF CONTENTS	8	01/23/2008		
TEXT 1.1 <b>Title:</b> USE AND APPLICATION DEFINITIONS	2	05/02/2008		
TEXT 1.2 <b>Title:</b> USE AND APPLICATION LOGICAL CONNECTORS	0	11/06/2002		
TEXT 1.3 <b>Title:</b> USE AND APPLICATION COMPLETION TIMES	0	11/06/2002		
TEXT 1.4 <b>Title:</b> USE AND APPLICATION FREQUENCY	1	01/19/2009		
TEXT 2.0 <b>Title:</b> SAFETY LIMITS SLS	4	05/02/2008		
TEXT 3.0 <b>Title:</b> LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY/SURVEILLANCE REQUIREMENT (SR) APPLICABILITY	2	10/12/2006		
TEXT 3.1.1 <b>Title:</b> REACTIVITY CONTROL SYSTEMS SHUTDOWN MARGIN (SDM)	0	11/06/2002		
TEXT 3.1.2 <b>Title:</b> REACTIVITY CONTROL SYSTEMS REACTIVITY ANOMALIES	0	11/06/2002		
TEXT 3.1.3 <b>Title:</b> REACTIVITY CONTROL SYSTEMS CONTROL ROD OPERABILITY	1	01/19/2009		

## SSES MANUAL

Manual Name: TS1

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 1 MAN

TEXT 3.1.4 2 01/30/2009

**Title:** REACTIVITY CONTROL SYSTEMS

TEXT 3.1.5 0 11/06/2002

**Title:** REACTIVITY CONTROL SYSTEMS CONTROL ROD SCRAM ACCUMULATORS

TEXT 3.1.6 0 11/06/2002

**Title:** REACTIVITY CONTROL SYSTEMS ROD PATTERN CONTROL

TEXT 3.1.7 3 05/02/2008

**Title:** REACTIVITY CONTROL SYSTEMS STANDBY LIQUID CONTROL (SLC) SYSTEM

TEXT 3.1.8 1 10/19/2005

**Title:** REACTIVITY CONTROL SYSTEMS SCRAM DISCHARGE VOLUME (SDV) VENT AND DRAIN VALVES

TEXT 3.2.1 1 05/02/2008

**Title:** POWER DISTRIBUTION LIMITS AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)

TEXT 3.2.2 1 05/02/2008

**Title:** POWER DISTRIBUTION LIMITS MINIMUM CRITICAL POWER RATIO (MCPR)

TEXT 3.2.3 1 05/02/2008

**Title:** POWER DISTRIBUTION LIMITS LINEAR HEAT GENERATION RATE (LHGR)

TEXT 3.3.1.1 3 05/02/2008

**Title:** INSTRUMENTATION REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION

TEXT 3.3.1.2 0 11/06/2002

**Title:** INSTRUMENTATION SOURCE RANGE MONITOR (SRM) INSTRUMENTATION

TEXT 3.3.2.1 2 05/02/2008

**Title:** INSTRUMENTATION CONTROL ROD BLOCK INSTRUMENTATION

TEXT 3.3.2.2 1 05/02/2008

**Title:** INSTRUMENTATION FEEDWATER MAIN TURBINE HIGH WATER LEVEL TRIP INSTRUMENTATION



## SSES MANUAL

Manual Name: TS1

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 1 MAN

TEXT 3.4.2	1	05/02/2008	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) JET PUMPS
TEXT 3.4.3	2	01/13/2012	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) SAFETY/RELIEF VALVES (S/RVS)
TEXT 3.4.4	0	11/14/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS OPERATIONAL LEAKAGE
TEXT 3.4.5	0	11/14/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS PRESSURE ISOLATION VALVE (PIV) LEAKAGE
TEXT 3.4.6	1	04/18/2005	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS LEAKAGE DETECTION INSTRUMENTATION
TEXT 3.4.7	1	04/18/2005	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS SPECIFIC ACTIVITY
TEXT 3.4.8	1	04/18/2005	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RESIDUAL HEAT REMOVAL (RHR) SHUTDOWN COOLING SYSTEM HOT SHUTDOWN
TEXT 3.4.9	0	11/14/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RESIDUAL HEAT REMOVAL (RHR) SHUTDOWN COOLING SYSTEM COLD SHUTDOWN
TEXT 3.4.10	2	05/02/2008	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) RCS PRESSURE AND TEMPERATURE (P/T) LIMITS
TEXT 3.4.11	0	11/14/2002	<b>Title:</b> REACTOR COOLANT SYSTEM (RCS) REACTOR STEAM DOME PRESSURE
TEXT 3.5.1	1	04/18/2005	<b>Title:</b> EMERGENCY CORE COOLING SYSTEM (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM ECCS OPERATING
TEXT 3.5.2	0	11/14/2002	<b>Title:</b> EMERGENCY CORE COOLING SYSTEM (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM ECCS SHUTDOWN

# SSES MANUAL

**Manual Name:** TS1

**Manual Title:** PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 1 MANUA

TEXT 3.5.3 1 04/18/2005  
**Title:** EMERGENCY CORE COOLING SYSTEM (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM RCIC SYSTEM

TEXT 3.6.1.1 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS PRIMARY CONTAINMENT

TEXT 3.6.1.2 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS PRIMARY CONTAINMENT AIR LOCK

TEXT 3.6.1.3 3 05/06/2009  
**Title:** CONTAINMENT SYSTEMS PRIMARY CONTAINMENT ISOLATION VALVES (PCIVS)

TEXT 3.6.1.4 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS CONTAINMENT PRESSURE

TEXT 3.6.1.5 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS DRYWELL AIR TEMPERATURE

TEXT 3.6.1.6 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS SUPPRESSION CHAMBER TO DRYWELL VACUUM BREAKERS

TEXT 3.6.2.1 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS SUPPRESSION POOL AVERAGE TEMPERATURE

TEXT 3.6.2.2 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS SUPPRESSION POOL WATER LEVEL

TEXT 3.6.2.3 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS RESIDUAL HEAT REMOVAL (RHR) SUPPRESSION POOL COOLING

TEXT 3.6.2.4 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS RESIDUAL HEAT REMOVAL (RHR) SUPPRESSION POOL SPRAY

TEXT 3.6.3.1 2 06/13/2006  
**Title:** CONTAINMENT SYSTEMS PRIMARY CONTAINMENT HYDROGEN RECOMBINERS



# SSES MANUAL

Manual Name: TS1

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 1 MANUAL

TEXT 3.6.3.2 1 04/18/2005  
**Title:** CONTAINMENT SYSTEMS DRYWELL AIR FLOW SYSTEM

TEXT 3.6.3.3 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS PRIMARY CONTAINMENT OXYGEN CONCENTRATION

TEXT 3.6.4.1 3 03/16/2006  
**Title:** CONTAINMENT SYSTEMS SECONDARY CONTAINMENT

TEXT 3.6.4.2 0 11/14/2002  
**Title:** CONTAINMENT SYSTEMS SECONDARY CONTAINMENT ISOLATION VALVES (SCIVS)

TEXT 3.6.4.3 1 10/24/2005  
**Title:** CONTAINMENT SYSTEMS STANDBY GAS TREATMENT (SGT) SYSTEM

TEXT 3.7.1 1 05/02/2008  
**Title:** PLANT SYSTEMS RESIDUAL HEAT REMOVAL SERVICE WATER (RHRSW) SYSTEM AND THE ULTIMATE HEAT SINK (UHS)

TEXT 3.7.2 0 11/14/2002  
**Title:** PLANT SYSTEMS EMERGENCY SERVICE WATER (ESW) SYSTEM

TEXT 3.7.3 1 01/08/2010  
**Title:** PLANT SYSTEMS CONTROL ROOM EMERGENCY OUTSIDE AIR SUPPLY (CREOAS) SYSTEM

TEXT 3.7.4 0 11/14/2002  
**Title:** PLANT SYSTEMS CONTROL ROOM FLOOR COOLING SYSTEM

TEXT 3.7.5 0 11/14/2002  
**Title:** PLANT SYSTEMS MAIN CONDENSER OFFGAS

TEXT 3.7.6 2 05/02/2008  
**Title:** PLANT SYSTEMS MAIN TURBINE BYPASS SYSTEM

TEXT 3.7.7 0 11/14/2002  
**Title:** PLANT SYSTEMS SPENT FUEL STORAGE POOL WATER LEVEL

# SSES MANUAL

Manual Name: TS1

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 1 MANUA

TEXT 3.7.8	0	05/02/2008		
<b>Title:</b> EXTENDED POWER UPRATE				
TEXT 3.8.1	4	05/24/2007		
<b>Title:</b> ELECTRICAL POWER SYSTEMS AC SOURCES OPERATING				
			LDCN	3586
TEXT 3.8.2	1	10/05/2005		
<b>Title:</b> ELECTRICAL POWER SYSTEMS AC SOURCES SHUTDOWN				
TEXT 3.8.3	0	11/14/2002		
<b>Title:</b> ELECTRICAL POWER SYSTEMS DIESEL FUEL OIL LUBE OIL AND STARTING AIR				
TEXT 3.8.4	3	01/19/2009		
<b>Title:</b> ELECTRICAL POWER SYSTEMS DC SOURCES OPERATING				
TEXT 3.8.5	1	12/14/2006		
<b>Title:</b> ELECTRICAL POWER SYSTEMS DC SOURCES SHUTDOWN				
TEXT 3.8.6	1	12/14/2006		
<b>Title:</b> ELECTRICAL POWER SYSTEMS BATTERY CELL PARAMETERS				
TEXT 3.8.7	1	10/05/2005		
<b>Title:</b> ELECTRICAL POWER SYSTEMS DISTRIBUTION SYSTEMS OPERATING				
TEXT 3.8.8	1	10/05/2005		
<b>Title:</b> ELECTRICAL POWER SYSTEMS DISTRIBUTION SYSTEMS SHUTDOWN				
TEXT 3.9.1	0	11/14/2002		
<b>Title:</b> REFUELING OPERATIONS REFUELING EQUIPMENT INTERLOCKS				
TEXT 3.9.2	0	11/14/2002		
<b>Title:</b> REFUELING OPERATIONS REFUEL POSITION ONE ROD OUT INTERLOCK				
TEXT 3.9.3	0	11/14/2002		
<b>Title:</b> REFUELING OPERATIONS CONTROL ROD POSITION				

## SSES MANUAL

Manual Name: TS1

Manual Title: PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 1 MANUA

TEXT 3.9.4	0	11/14/2002	<b>Title:</b> REFUELING OPERATIONS CONTROL ROD POSITION INDICATION
TEXT 3.9.5	0	11/14/2002	<b>Title:</b> REFUELING OPERATIONS CONTROL ROD OPERABILITY REFUELING
TEXT 3.9.6	0	11/14/2002	<b>Title:</b> REFUELING OPERATIONS REACTOR PRESSURE VESSEL (RPV) WATER LEVEL
TEXT 3.9.7	0	11/14/2002	<b>Title:</b> REFUELING OPERATIONS RESIDUAL HEAT REMOVAL (RHR) HIGH WATER LEVEL
TEXT 3.9.8	0	11/14/2002	<b>Title:</b> REFUELING OPERATIONS RESIDUAL HEAT REMOVAL (RHR) LOW WATER LEVEL
TEXT 3.10.1	1	01/23/2008	<b>Title:</b> SPECIAL OPERATIONS INSERVICE LEAK AND HYDROSTATIC TESTING OPERATION
TEXT 3.10.2	0	11/14/2002	<b>Title:</b> SPECIAL OPERATIONS REACTOR MODE SWITCH INTERLOCK TESTING
TEXT 3.10.3	0	11/14/2002	<b>Title:</b> SPECIAL OPERATIONS SINGLE CONTROL ROD WITHDRAWAL HOT SHUTDOWN
TEXT 3.10.4	0	11/14/2002	<b>Title:</b> SPECIAL OPERATIONS SINGLE CONTROL ROD WITHDRAWAL COLD SHUTDOWN
TEXT 3.10.5	0	11/14/2002	<b>Title:</b> SPECIAL OPERATIONS SINGLE CONTROL ROD DRIVE (CRD) REMOVAL REFUELING
TEXT 3.10.6	0	11/14/2002	<b>Title:</b> SPECIAL OPERATIONS MULTIPLE CONTROL ROD WITHDRAWAL REFUELING
TEXT 3.10.7	0	11/14/2002	<b>Title:</b> SPECIAL OPERATIONS CONTROL ROD TESTING OPERATING

## SSSES MANUAL

**Manual Name:** TS1

**Manual Title:** PP&L SUSQUEHANNA STEAM ELECTRIC STATION TECHNICAL SPECIFICATIONS UNIT 1 MANUA

TEXT 3.10.8	2	12/15/2009
<b>Title:</b> SPECIAL OPERATIONS SHUTDOWN MARGIN (SDM) TEST REFUELING		
TEXT 4.0	2	05/24/2007
<b>Title:</b> DESIGN FEATURES		
TEXT 5.1	0	11/14/2002
<b>Title:</b> ADMINISTRATIVE CONTROLS RESPONSIBILITY		
TEXT 5.2	1	10/09/2009
<b>Title:</b> ADMINISTRATIVE CONTROLS ORGANIZATION		
TEXT 5.3	0	11/14/2002
<b>Title:</b> ADMINISTRATIVE CONTROLS UNIT STAFF QUALIFICATIONS		
TEXT 5.4	0	11/14/2002
<b>Title:</b> ADMINISTRATIVE CONTROLS PROCEDURES		
TEXT 5.5	5	01/08/2010
<b>Title:</b> ADMINISTRATIVE CONTROLS PROGRAMS AND MANUALS		
TEXT 5.6	7	05/02/2008
<b>Title:</b> ADMINISTRATIVE CONTROLS REPORTING REQUIREMENTS		
TEXT 5.7	0	11/14/2002
<b>Title:</b> ADMINISTRATIVE CONTROLS HIGH RADIATION AREA		
TEXT APPENDIX B	0	11/14/2002
<b>Title:</b> ENVIRONMENTAL PROTECTION PLAN NON RADIOLOGICAL		

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS)

PPL Rev. 36

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
TOC	Table of Contents	
	TS/TOC-1	242
	TS/TOC-2	234
	TS/TOC-3	245
	TS/TOC-4	233
1.0	USE AND APPLICATION	
1.1	Definitions	
	Page 1.1-1	178
	Pages 1.1-2 and 1.1-3	239
	Page 1.1-4	178
	Page 1.1-5	242
	Page 1.1-6	246
	Pages 1.1-7 and 1.1-8	178
1.2	Logical Connectors	
	Pages 1.2-1 through 1.2-3	178
1.3	Completion Times	
	Pages 1.3-1 through 1.3-13	178
1.4	Frequency	
	Pages 1.4-1 through 1.4-3	178
	Pages TS / 1.4-4 and TS / 1.4-5	250
2.0	SAFETY LIMITS (SLs)	
	Page TS / 2.0-1	246
	Pages 2.0-2 and 2.0-3	186
3.0	LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY/ SURVEILLANCE REQUIREMENT (SR) APPLICABILITY	
	Page TS / 3.0-1	236
	Page TS / 3.0-2	219
	Page TS / 3.0-3	236
	Page TS / 3.0-4	205
	Page TS / 3.0-5	219
3.1	REACTIVITY CONTROL SYSTEMS	
	Pages 3.1-1 through 3.1-7	178
	Page TS / 3.1-8	250
	Page 3.1-9	178
	Page TS / 3.1-10	250
	Page 3.1-11	178

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS)

PPL Rev. 36

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
	Page TS / 3.1-12	237
	Page TS / 3.1-13	249
	Pages 3.1-14 through 3.1-19	178
	Pages 3.1-20 and 3.1-21	240
	Page TS / 3.1-22	240
	Page 3.1-23	240
	Page 3.1-24	178
	Page TS / 3.1-25	222
	Page 3.1-26	178
3.2	POWER DISTRIBUTION LIMITS Pages 3.2-1 through 3.2-6	246
3.3	INSTRUMENTATION	
	Page TS / 3.3-1	230
	Pages TS / 3.3-2 and TS / 3.3-3	246
	Page 3.3-4	178
	Pages TS / 3.3-5 through TS / 3.3-9	246
	Pages 3.3-10 through 3.3-15	178
	Page 3.3-16	242
	Page 3.3-17	178
	Page TS / 3.3-18 through TS / 3.3-20	242
	Page 3.3-21	246
	Page 3.3-22	178
	Page TS / 3.3-23	219
	Pages TS / 3.3-24 and TS / 3.3-25	234
	Page TS / 3.3-26	219
	Pages 3.3-27 and 3.3-28	178
	Pages 3.3-29 through 3.3-31	246
	Pages 3.3-32 through 3.3-40	178
	Page TS / 3.3-41	225
	Pages TS / 3.3-42 and TS / 3.3-43	181
	Page TS / 3.3-44	254
	Page TS / 3.3-45	204
	Pages TS / 3.3-46 and TS / 3.3-47	220
	Pages 3.3-48 through 3.3-51	178
	Page TS / 3.3-52	213
	Pages 3.3-53 through 3.3-55	178
	Page TS / 3.3-56	191

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS)

PPL Rev. 36

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
	Page TS / 3.3-57	246
	Pages 3.3-58 through 3.3-60	178
	Page 3.3-61	239
	Page TS / 3.3-62	213
	Pages 3.3-63 through 3.3-77	178
3.4	<b>REACTOR COOLANT SYSTEM (RCS)</b>	
	Page TS / 3.4-1	230
	Pages TS / 3.4-2 through TS / 3.4-5	217
	Page 3.4-6	178
	Pages 3.4-7 and 3.4-8	246
	Page TS / 3.4-9	257
	Pages 3.4-10 through 3.4-13	178
	Pages TS / 3.4-14 and TS / 3.4-15	219
	Page 3-4-16	178
	Page TS / 3.4-17	219
	Page 3.4-18	178
	Page TS / 3.4-19	219
	Pages 3.4-20 through 3.4-25	178
	Page TS / 3.4-26	200
	Pages 3.4-27 and 3.4-28	246
	Page TS / 3.4-29	178
	Pages TS / 3.4-30 through TS / 3.4-30b	232
	Page 3.4-31	178
3.5	<b>EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM</b>	
	Page TS / 3.5-1	219
	Pages 3.5-2 through 3.5-11	178
	Page TS / 3.5-12	219
	Pages 3.5-13 and 3.5-14	178
3.6	<b>CONTAINMENT SYSTEMS</b>	
	Pages 3.6-1 through 3.6-7	178
	Page TS / 3.6-8	195
	Page TS / 3.6-9	178
	Pages TS / 3.6-10 and TS / 3.6-11	195
	Pages TS / 3.6-12 and TS / 3.6-13	178
	Page TS / 3.6-14	223
	Page TS / 3.6-15	251
	Pages 3.6-16 through 3.6-20	178

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS)**

PPL Rev. 36

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
	Page TS / 3.6-21	198
	Pages 3.6-22 through 3.6-25	178
	Page TS / 3.6-26	207
	Pages 3.6-27 through 3.6-29	178
	Pages TS / 3.6-30 and TS / 3.6-31	234
	Page TS / 3.6-32	219
	Pages 3.6-33 and 3.6-34	178
	Pages TS / 3.6-35 and TS / 3.6-36	226
	Page TS / 3.6-37	229
	Pages 3.6-38 through 3.6-42	178
	Pages TS / 3.6-43 and TS / 3.6-44	226
3.7	<b>PLANT SYSTEMS</b>	
	Page TS / 3.7-1	246
	Page TS / 3.7-2	206
	Page TS / 3.7-3	246
	Pages TS / 3.7-3a through TS / 3.7-3d	246
	Pages 3.7-4 and 3.7-5	178
	Pages TS / 3.7-6 through TS / 3.7-9	252
	Pages 3.7-10 through 3.7-14	178
	Page TS / 3.7-15	246
	Page TS / 3.7-16	218
	Page 3.7-17	178
	Pages 3.7-18 and TS / 3.7-19	246
3.8	<b>ELECTRICAL POWER SYSTEMS</b>	
	Page TS / 3.8-1	219
	Page TS / 3.8-2	225
	Page TS / 3.8-3	243
	Page TS / 3.8-4	214
	Page 3.8-5	178
	Page TS / 3.8-6	185
	Pages 3.8-7 through 3.8-16	178
	Page TS / 3.8-17	225
	Pages 3.8-18 and 3.8-19	178
	Page TS / 3.8-20	183
	Page TS / 3.8-21	178
	Page TS / 3.8-22	183
	Pages TS / 3.8-23 and TS / 3.8-23a	248
	Page TS / 3.8-24	248
	Page TS / 3.8-25	238



SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS** (TECHNICAL SPECIFICATIONS)

PPL Rev. 36

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
	Page TS / 3.8-26	248
	Pages TS / 3.8-27 and TS / 3.8-28	238
	Pages 3.8-29 and 3.8-30	178
	Pages TS / 3.8-31 through TS / 3.8-36	238
	Page TS / 3.8-37	225
	Pages 3.8-38 through 3.8-40	178
	Page TS / 3.8-41	225
	Pages 3.8-42 and 3.8-43	178
3.9	<b>REFUELING OPERATIONS</b> Pages 3.9-1 through 3.9-15	178
3.10	<b>SPECIAL OPERATIONS</b> Page TS / 3.10-1 Pages 3.10-2 through 3.10-19 Page TS / 3.10-20 Page TS / 3.10-21 Pages 3.10-22 and 3.10-23	245 178 254 230 178
4.0	<b>DESIGN FEATURES</b> Page TS / 4.0-1 Pages 4.0-2 and 4.0-3 Page TS / 4.0-4	216 178 243
5.0	<b>ADMINISTRATIVE CONTROLS</b> Pages 5.0-1 and 5.0-2 Pages TS / 5.0-3 and TS / 5.0-4 Pages 5.0-5 through 5.0-7 Page TS / 5.0-8 Page TS / 5.0-9 Page 5.0-10 Page TS / 5.0-11 Pages 5.0-12 and 5.0-13 Page TS / 5.0-14 Page 5.0-15 Pages TS / 5.0-16 and TS / 5.0-17 Page TS / 5.0-18 Page TS / 5.0-18A Pages TS / 5.0-18B and TS / 5.0-18C Page TS / 5.0-19	178 253 178 212 209 178 241 178 211 178 209 246 241 252 233

SUSQUEHANNA STEAM ELECTRIC STATION  
**LIST OF EFFECTIVE SECTIONS (TECHNICAL SPECIFICATIONS)**

PPL Rev. 36

---

<u>Section</u>	<u>Title</u>	<u>Amendment</u>
	Page TS / 5.0-20	209
	Page TS / 5.0-21 through TS / 5.0-23	246
	Page TS / 5.0-24	209
	Page TS / 5.0-25	186
	Pages 5.0-26 through 5.0-30	178
Appendix B	Environmental Protection Plan	188

TS1Text LOES  
1/10/2012

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.3 Safety/Relief Valves (S/RVs)

LCO 3.4.3 The safety function of 14 S/RVs shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A.1 One or more required S/RVs inoperable.	A.1 Be in MODE 3.	12 hours
	<u>AND</u>	
	A.2 Be in MODE 4.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY								
SR 3.4.3.1	<p>Verify the safety function lift setpoints of the required S/RVs are as follows:</p> <p>-----NOTE-----</p> <p>Up to two inoperable required S/RVs may be replaced with spare OPERABLE S/RVs having lower setpoints until the next refueling outage.</p> <p>-----</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>Number of S/RVs</u></th> <th style="text-align: center;"><u>Setpoint (psig)</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">1175 (<math>\geq 1117</math> and <math>\leq 1210</math>)</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">1195 (<math>\geq 1136</math> and <math>\leq 1230</math>)</td> </tr> <tr> <td style="text-align: center;">8</td> <td style="text-align: center;">1205 (<math>\geq 1145</math> and <math>\leq 1241</math>)</td> </tr> </tbody> </table> <p>Following testing, lift settings shall be within <math>\pm 1\%</math>.</p>	<u>Number of S/RVs</u>	<u>Setpoint (psig)</u>	2	1175 ( $\geq 1117$ and $\leq 1210$ )	6	1195 ( $\geq 1136$ and $\leq 1230$ )	8	1205 ( $\geq 1145$ and $\leq 1241$ )	In accordance with the Inservice Testing Program
<u>Number of S/RVs</u>	<u>Setpoint (psig)</u>									
2	1175 ( $\geq 1117$ and $\leq 1210$ )									
6	1195 ( $\geq 1136$ and $\leq 1230$ )									
8	1205 ( $\geq 1145$ and $\leq 1241$ )									