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TO:        GERLACH\*ROSEY M            10/13/2020

LOCATION:    USNRC

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

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

TRM1 - TECHNICAL REQUIREMENTS MANUAL UNIT 1

REMOVE MANUAL TABLE OF CONTENTS    DATE: 09/22/2020

ADD        MANUAL TABLE OF CONTENTS    DATE: 10/12/2020

CATEGORY: DOCUMENTS    TYPE: TRM1

ADD  
NRR

ID: TEXT 3.1.4

ADD: REV: 1

REMOVE: REV:0

CATEGORY: DOCUMENTS TYPE: TRM1

ID: TEXT B3.1.4

REMOVE: REV:0

ADD: REV: 1

ANY DISCREPANCIES WITH THE MATERIAL PROVIDED, CONTACT DCS @ X3171 OR X3194 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: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT B3.12.3

0 11/19/2002

Title: LOADS CONTROL PROGRAM BASES LIGHT LOADS REQUIREMENTS

# SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT B3.11.2.1	1	12/14/2004	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES DOSE RATE
TEXT B3.11.2.2	0	11/19/2002	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES DOSE - NOBLE GASES
TEXT B3.11.2.3	0	11/19/2002	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES DOSE - IODINE, TRITIUM, AND RADIONUCLIDES IN PARTICULATES FORM
TEXT B3.11.2.4	0	11/19/2002	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES GASEOUS RADWASTE TREATMENT SYSTEM
TEXT B3.11.2.5	5	07/03/2013	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES VENTILATION EXHAUST TREATMENT SYSTEM
TEXT B3.11.2.6	2	09/08/2016	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION
TEXT B3.11.3	0	11/19/2002	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES TOTAL DOSE
TEXT B3.11.4.1	5	03/05/2015	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES MONITORING PROGRAM
TEXT B3.11.4.2	0	11/19/2002	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES LAND USE CENSUS
TEXT B3.11.4.3	0	11/19/2002	<b>Title:</b> RADIOACTIVE EFFLUENTS BASES INTERLABORATORY COMPARISON PROGRAM
TEXT B3.12.1	1	10/04/2007	<b>Title:</b> LOADS CONTROL PROGRAM BASES CRANE TRAVEL-SPENT FUEL STORAGE POOL
TEXT B3.12.2	1	12/03/2010	<b>Title:</b> LOADS CONTROL PROGRAM BASES HEAVY LOADS REQUIREMENTS

## SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT B3.9.1 0 11/19/2002

Title: REFUELING OPERATIONS BASES DECAY TIME

TEXT B3.9.2 0 11/19/2002

Title: REFUELING OPERATIONS BASES COMMUNICATIONS

TEXT B3.9.3 1 03/12/2019

Title: REFUELING OPERATIONS BASES REFUELING PLATFORM

TEXT B3.10.1 0 11/19/2002

Title: MISCELLANEOUS BASES SEALED SOURCE CONTAMINATION

TEXT B3.10.2 1 03/31/2006

Title: MISCELLANEOUS BASES SHUTDOWN MARGIN TEST RPS INSTRUMENTATION

TEXT B3.10.3 2 10/17/2019

Title: MISCELLANEOUS BASES INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI)

TEXT B3.10.4 1 04/17/2008

Title: INTENTIONALLY LEFT BLANK

TEXT B3.11.1.1 0 11/19/2002

Title: RADIOACTIVE EFFLUENTS BASES LIQUID EFFLUENTS CONCENTRATION

TEXT B3.11.1.2 0 11/19/2002

Title: RADIOACTIVE EFFLUENTS BASES LIQUID EFFLUENTS DOSE

TEXT B3.11.1.3 0 11/19/2002

Title: RADIOACTIVE EFFLUENTS BASES LIQUID WASTE TREATMENT SYSTEM

TEXT B3.11.1.4 0 11/19/2002

Title: RADIOACTIVE EFFLUENTS BASES LIQUID RADWASTE EFFLUENT MONITORING INSTRUMENTATION

TEXT B3.11.1.5 0 11/19/2002

Title: RADIOACTIVE EFFLUENTS BASES RADIOACTIVE LIQUID PROCESS MONITORING  
INSTRUMENTATION

# SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT B3.7.8	4	01/31/2014	<b>Title:</b> PLANT SYSTEMS BASES SNUBBERS
TEXT B3.7.9	3	03/05/2019	<b>Title:</b> PLANT SYSTEMS BASES CONTROL STRUCTURE HVAC
TEXT B3.7.10	1	12/14/2004	<b>Title:</b> PLANT SYSTEMS BASES SPENT FUEL STORAGE POOLS
TEXT B3.7.11	2	11/01/2018	<b>Title:</b> STRUCTURAL INTEGRITY
TEXT B3.8.1	2	03/10/2010	<b>Title:</b> ELECTRICAL POWER BASES PRIMARY CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES
TEXT B3.8.2.1	0	11/19/2002	<b>Title:</b> ELECTRICAL POWER BASES MOTOR OPERATED VALVES (MOV) THERMAL OVERLOAD PROTECTION - CONTINUOUS
TEXT B3.8.2.2	1	09/17/2004	<b>Title:</b> ELECTRICAL POWER BASES MOTOR OPERATED VALVES (MOV) THERMAL OVERLOAD PROTECTION - AUTOMATIC
TEXT B3.8.3	0	11/19/2002	<b>Title:</b> ELECTRICAL POWER BASES DIESEL GENERATOR (DG) MAINTENANCE ACTIVITIES
TEXT B3.8.4	0	11/19/2002	<b>Title:</b> ELECTRICAL POWER BASES 24 VDC ELECTRICAL POWER SUBSYSTEM
TEXT B3.8.5	1	11/14/2013	<b>Title:</b> ELECTRICAL POWER BASES DEGRADED VOLTAGE PROTECTION
TEXT B3.8.6	3	03/05/2019	<b>Title:</b> ELECTRICAL POWER BASES EMERGENCY SWITCHGEAR ROOM COOLING
TEXT B3.8.7	2	06/04/2013	<b>Title:</b> BATTERY MAINTENANCE AND MONITORING PROGRAM

# SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT B3.7.3.3 1 01/03/2019

Title: PLANT SYSTEMS BASES CO2 SYSTEMS

TEXT B3.7.3.4 4 06/19/2019

Title: PLANT SYSTEMS BASES HALON SYSTEMS

TEXT B3.7.3.5 1 04/26/2006

Title: PLANT SYSTEMS BASES FIRE HOSE STATIONS

TEXT B3.7.3.6 1 04/26/2006

Title: PLANT SYSTEMS BASES YARD FIRE HYDRANTS AND HYDRANT HOSE HOUSES

TEXT B3.7.3.7 0 11/19/2002

Title: PLANT SYSTEMS BASES FIRE RATED ASSEMBLIES

TEXT B3.7.3.8 3 09/27/2012

Title: PLANT SYSTEMS BASES FIRE DETECTION INSTRUMENTATION

TEXT B3.7.4 0 11/19/2002

Title: PLANT SYSTEMS BASES SOLID RADWASTE SYSTEM

TEXT B3.7.5.1 0 11/19/2002

Title: PLANT SYSTEMS BASES MAIN CONDENSER OFFGAS HYDROGEN MONITOR

TEXT B3.7.5.2 0 11/19/2002

Title: PLANT SYSTEMS BASES MAIN CONDENSER OFFGAS EXPLOSIVE GAS MIXTURE

TEXT B3.7.5.3 0 11/19/2002

Title: PLANT SYSTEMS BASES LIQUID HOLDUP TANKS

TEXT B3.7.6 4 06/04/2013

Title: PLANT SYSTEMS BASES ESSW PUMPHOUSE VENTILATION

TEXT B3.7.7 2 01/31/2008

Title: PLANT SYSTEMS BASES MAIN CONDENSER OFFGAS PRETREATMENT LOGARITHMIC RADIATION MONITORING INSTRUMENTATION

## SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT B3.4.6 3 01/03/2019  
Title: REACTOR RECIRCULATION SINGLE LOOP OPERATION SLO FLOW RATE RESTRICTION

TEXT B3.5.1 2 03/17/2020  
Title: ECCS RPV WATER INVENTORY CONTROL AND RCIC SYSTEM ADS MANUAL INHIBIT

TEXT B3.5.2 2 03/05/2019  
Title: ECCS RPV WATER INVENTORY CONTROL AND RCIC SYSTEM ECCS RPV WATER INVENTORY CONTROL AND RCIC MONITORING INSTRUMENTATION

TEXT B3.5.3 2 03/05/2019  
Title: ECCS RPV WATER INVENTORY CONTROL AND RCIC SYSTEM LONG TERM NITROGEN SUPPLY TO ADS

TEXT B3.6.1 0 11/19/2002  
Title: CONTAINMENT BASES VENTING OR PURGING

TEXT B3.6.2 0 11/19/2002  
Title: CONTAINMENT BASES SUPPRESSION CHAMBER-TO-DRYWELL VACUUM BREAKER POSITION INDICATION

TEXT B3.6.3 2 04/17/2008  
Title: CONTAINMENT BASES SUPPRESSION POOL ALARM INSTRUMENTATION

TEXT B3.6.4 1 12/14/2004  
Title: CONTAINMENT BASES PRIMARY CONTAINMENT CLOSED SYSTEM BOUNDARIES

TEXT B3.7.1 0 11/19/2002  
Title: PLANT SYSTEMS BASES EMERGENCY SERVICE WATER SYSTEM (SHUTDOWN)

TEXT B3.7.2 0 11/19/2002  
Title: PLANT SYSTEMS BASES ULTIMATE HEAT SINK (UHS) GROUND WATER LEVEL

TEXT B3.7.3.1 4 02/16/2017  
Title: PLANT SYSTEMS BASES FIRE SUPPRESSION WATER SUPPLY SYSTEM

TEXT B3.7.3.2 2 04/26/2006  
Title: PLANT SYSTEMS BASES SPRAY AND SPRINKLER SYSTEMS



## SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT B3.3.6	6	03/05/2019	Title: INSTRUMENTATION BASES TRM ISOLATION ACTUATION INSTRUMENTATION
TEXT B3.3.7	2	11/10/2015	Title: INSTRUMENTATION BASES MAIN TURBINE OVERSPEED PROTECTION SYSTEM
TEXT B3.3.8	1	10/22/2003	Title: INTENTIONALLY LEFT BLANK
TEXT B3.3.9	4	01/03/2019	Title: OPRM INSTRUMENTATION
TEXT B3.3.10	3	08/09/2010	Title: INSTRUMENTATION BASES REACTOR RECIRCULATION PUMP MG SET STOPS
TEXT B3.3.11	1	10/22/2003	Title: INSTRUMENTATION BASES MVP ISOLATION INSTRUMENTATION
TEXT B3.3.12	1	04/02/2019	Title: WATER MONITORING INSTRUMENTATION
TEXT B3.4.1	0	11/19/2002	Title: REACTOR COOLANT SYSTEM BASES REACTOR COOLANT SYSTEM CHEMISTRY
TEXT B3.4.2	1	04/16/2009	Title: INTENTIONALLY LEFT BLANK
TEXT B3.4.3	1	11/09/2007	Title: REACTOR COOLANT SYSTEM BASES HIGH/LOW PRESSURE INTERFACE LEAKAGE MONITOR
TEXT B3.4.4	0	11/19/2002	Title: REACTOR COOLANT SYSTEM BASES REACTOR RECIRCULATION FLOW AND ROD LINE LIMIT
TEXT B3.4.5	0	11/19/2002	Title: REACTOR COOLANT SYSTEM BASES REACTOR VESSEL MATERIALS

# SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT 4.7 0 08/31/1998

Title: ADMINISTRATIVE CONTROLS TRAINING

TEXT B3.0 5 03/05/2015

Title: APPLICABILITY BASES TECHNICAL REQUIREMENT FOR OPERATION (TRO) APPLICABILITY

TEXT B3.1.1 2 04/29/2014

Title: REACTIVITY CONTROL SYSTEMS BASES ANTICIPATED TRANSIENT WITHOUT SCRAM ALTERNATE ROD INJECTION (ATWS-ARI) INSTRUMENTATION

TEXT B3.1.2 0 11/19/2002

Title: REACTIVITY CONTROL SYSTEMS BASES CONTROL ROD DRIVE (CRD) HOUSING SUPPORT

TEXT B3.1.3 4 12/18/2017

Title: REACTIVITY CONTROL SYSTEMS BASES CONTROL ROD BLOCK INSTRUMENTATION

TEXT B3.1.4 1 10/12/2020

Title: REACTIVITY CONTROL SYSTEMS BASES CONTROL ROD SCRAM ACCUMULATORS INSTRUMENTATION AND CHECK VALVE

TEXT B3.2.1 0 11/19/2002

Title: CORE OPERATING LIMITS BASES CORE OPERATING LIMITS REPORT (COLR)

TEXT B3.3.1 1 01/31/2014

Title: INSTRUMENTATION BASES RADIATION MONITORING INSTRUMENTATION

TEXT B3.3.2 2 03/31/2011

Title: INSTRUMENTATION BASES SEISMIC MONITORING INSTRUMENTATION

TEXT B3.3.3 3 12/18/2008

Title: INSTRUMENTATION BASES METEOROLOGICAL MONITORING INSTRUMENTATION

TEXT B3.3.4 7 06/29/2017

Title: INSTRUMENTATION BASES TRM POST ACCIDENT MONITORING (PAM) INSTRUMENTATION

TEXT B3.3.5 2 11/09/2007

Title: INTENTIONALLY LEFT BLANK

## SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT 3.11.4.1	5	03/05/2015	Title: RADIOACTIVE EFFLUENTS MONITORING PROGRAM
TEXT 3.11.4.2	2	04/26/2006	Title: RADIOACTIVE EFFLUENTS LAND USE CENSUS
TEXT 3.11.4.3	1	04/26/2006	Title: RADIOACTIVE EFFLUENTS INTERLABORATORY COMPARISON PROGRAM
TEXT 3.12.1	0	11/19/2002	Title: LOADS CONTROL PROGRAM CRANE TRAVEL-SPENT FUEL POOL STORAGE POOL
TEXT 3.12.2	4	04/17/2008	Title: LOADS CONTROL PROGRAM HEAVY LOADS REQUIREMENTS
TEXT 3.12.3	0	11/19/2002	Title: LOADS CONTROL PROGRAM LIGHT LOADS REQUIREMENT
TEXT 4.1	0	08/31/1998	Title: ADMINISTRATIVE CONTROLS ORGANIZATION
TEXT 4.2	1	01/03/2019	Title: ADMINISTRATIVE CONTROLS REPORTABLE EVENT ACTION
TEXT 4.3	1	01/03/2019	Title: ADMINISTRATIVE CONTROLS SAFETY LIMIT VIOLATION
TEXT 4.4	1	12/18/2008	Title: ADMINISTRATIVE CONTROLS PROCEDURES & PROGRAMS
TEXT 4.5	0	08/31/1998	Title: ADMINISTRATIVE CONTROLS REPORTING REQUIREMENTS
TEXT 4.6	0	08/31/1998	Title: ADMINISTRATIVE CONTROLS RADIATION PROTECTION PROGRAM

# SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT 3.11.1.1	1	04/26/2006	Title: RADIOACTIVE EFFLUENTS LIQUID EFFLUENTS CONCENTRATION
TEXT 3.11.1.2	1	04/26/2006	Title: RADIOACTIVE EFFLUENTS LIQUID EFFLUENTS DOSE
TEXT 3.11.1.3	1	04/26/2006	Title: RADIOACTIVE EFFLUENTS LIQUID WASTE TREATMENT SYSTEM
TEXT 3.11.1.4	2	10/09/2012	Title: RADIOACTIVE EFFLUENTS LIQUID RADWASTE EFFLUENT MONITORING INSTRUMENTATION
TEXT 3.11.1.5	3	03/05/2015	Title: RADIOACTIVE EFFLUENTS RADIOACTIVE LIQUID PROCESS MONITORING INSTRUMENTATION
TEXT 3.11.2.1	4	03/12/2019	Title: RADIOACTIVE EFFLUENTS DOSE RATE
TEXT 3.11.2.2	1	04/26/2006	Title: RADIOACTIVE EFFLUENTS DOSE - NOBLE GASES
TEXT 3.11.2.3	1	04/26/2006	Title: RADIOACTIVE EFFLUENTS DOSE - IODINE, TRITIUM, AND RADIONUCLIDES IN PARTICULATE FORM
TEXT 3.11.2.4	0	11/18/2002	Title: RADIOACTIVE EFFLUENTS GASEOUS RADWASTE TREATMENT SYSTEM
TEXT 3.11.2.5	4	07/03/2013	Title: RADIOACTIVE EFFLUENTS VENTILATION EXHAUST TREATMENT SYSTEM
TEXT 3.11.2.6	8	06/29/2017	Title: RADIOACTIVE EFFLUENTS RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION
TEXT 3.11.3	1	04/26/2006	Title: RADIOACTIVE EFFLUENTS TOTAL DOSE

## SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT 3.8.3	4	01/28/2020	Title: ELECTRICAL POWER DIESEL GENERATOR (DG) MAINTENANCE ACTIVITIES
TEXT 3.8.4	0	11/18/2002	Title: ELECTRICAL POWER 24 VDC ELECTRICAL POWER SUBSYSTEM
TEXT 3.8.5	1	11/14/2013	Title: ELECTRICAL POWER DEGRADED VOLTAGE PROTECTION
TEXT 3.8.6	2	03/05/2019	Title: ELECTRICAL POWER EMERGENCY SWITCHGEAR ROOM COOLING
TEXT 3.8.7	1	06/15/2009	Title: BATTERY MAINTENANCE AND MONITORING PROGRAM
TEXT 3.9.1	0	11/18/2002	Title: REFUELING OPERATIONS DECAY TIME
TEXT 3.9.2	0	11/18/2002	Title: REFUELING OPERATIONS COMMUNICATIONS
TEXT 3.9.3	1	03/12/2019	Title: REFUELING OPERATIONS REFUELING PLATFORM
TEXT 3.10.1	1	04/26/2006	Title: MISCELLANEOUS SEAL SOURCE CONTAMINATION
TEXT 3.10.2	3	06/19/2019	Title: MISCELLANEOUS SHUTDOWN MARGIN TEST RPS INSTRUMENTATION
TEXT 3.10.3	3	10/17/2019	Title: MISCELLANEOUS INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI)
TEXT 3.10.4	2	04/17/2008	Title: INTENTIONALLY LEFT BLANK

# SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT 3.7.5.1	1	03/05/2015	Title: PLANT SYSTEMS MAIN CONDENSER OFFGAS HYDROGEN MONITOR
TEXT 3.7.5.2	0	11/18/2002	Title: PLANT SYSTEMS MAIN CONDENSER OFFGAS EXPLOSIVE GAS MIXTURE
TEXT 3.7.5.3	1	04/26/2006	Title: PLANT SYSTEMS LIQUID HOLDUP TANKS
TEXT 3.7.6	3	06/04/2012	Title: PLANT SYSTEMS ESSW PUMPHOUSE VENTILATION
TEXT 3.7.7	2	09/05/2008	Title: PLANT SYSTEMS MAIN CONDENSER OFFGAS PRETREATMENT LOGARITHMIC RADIATION MONITORING
TEXT 3.7.8	5	03/05/2015	Title: PLANT SYSTEMS SNUBBERS
TEXT 3.7.9	3	03/05/2019	Title: PLANT SYSTEMS CONTROL STRUCTURE HVAC
TEXT 3.7.10	1	12/14/2004	Title: PLANT SYSTEMS SPENT FUEL STORAGE POOLS (SFSPS)
TEXT 3.7.11	1	11/01/2018	Title: STRUCTURAL INTEGRITY
TEXT 3.8.1	3	04/22/2020	Title: ELECTRICAL POWER PRIMARY CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES
TEXT 3.8.2.1	2	11/09/2007	Title: ELECTRICAL POWER MOTOR OPERATED VALVES (MOV) THERMAL OVERLOAD PROTECTION - CONTINUOUS
TEXT 3.8.2.2	2	12/14/2004	Title: ELECTRICAL POWER MOTOR OPERATED VALVES (MOV) THERMAL OVERLOAD PROTECTION - AUTOMATIC

## SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT 3.6.4 0 11/18/2002  
Title: CONTAINMENT PRIMARY CONTAINMENT CLOSED SYSTEM BOUNDARIES

TEXT 3.7.1 0 11/18/2002  
Title: PLANT SYSTEMS EMERGENCY SERVICE WATER SYSTEM (ESW) SHUTDOWN

TEXT 3.7.2 0 11/18/2002  
Title: PLANT SYSTEMS ULTIMATE HEAT SINK (UHS) AND GROUND WATER LEVEL

TEXT 3.7.3.1 5 02/13/2020  
Title: PLANT SYSTEMS FIRE SUPPRESSION WATER SUPPLY SYSTEM

TEXT 3.7.3.2 3 04/16/2009  
Title: PLANT SYSTEMS SPRAY AND SPRINKLER SYSTEMS

TEXT 3.7.3.3 4 05/16/2016  
Title: PLANT SYSTEMS CO2 SYSTEMS

TEXT 3.7.3.4 2 04/16/2009  
Title: PLANT SYSTEMS HALON SYSTEMS

TEXT 3.7.3.5 2 04/16/2009  
Title: PLANT SYSTEMS FIRE HOSE STATIONS

TEXT 3.7.3.6 2 04/16/2009  
Title: PLANT SYSTEMS YARD FIRE HYDRANTS AND HYDRANT HOSE HOUSES

TEXT 3.7.3.7 1 04/26/2006  
Title: PLANT SYSTEMS FIRE RATED ASSEMBLIES

TEXT 3.7.3.8 13 12/18/2017  
Title: PLANT SYSTEMS FIRE DETECTION INSTRUMENTATION

TEXT 3.7.4 1 04/26/2006  
Title: PLANT SYSTEMS SOLID RADWASTE SYSTEM

# SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT 3.4.1	1	04/26/2006	Title: REACTOR COOLANT SYSTEM REACTOR COOLANT SYSTEM CHEMISTRY
TEXT 3.4.2	1	04/16/2009	Title: REACTOR COOLANT SYSTEM INTENTIONALLY LEFT BLANK
TEXT 3.4.3	1	11/09/2007	Title: REACTOR COOLANT SYSTEM HIGH/LOW PRESSURE INTERFACE LEAKAGE MONITORS
TEXT 3.4.4	2	04/17/2008	Title: REACTOR COOLANT SYSTEM REACTOR RECIRCULATION FLOW AND ROD LINE LIMIT
TEXT 3.4.5	1	04/26/2006	Title: REACTOR COOLANT SYSTEM REACTOR VESSEL MATERIALS
TEXT 3.4.6	2	04/25/2013	Title: REACTOR RECIRCULATION SINGLE LOOP OPERATION SLO FLOW RATE RESTRICTION
TEXT 3.5.1	2	03/05/2019	Title: ECCS RPV WATER INVENTORY CONTROL AND RCIC SYSTEM ADS MANUAL INHIBIT
TEXT 3.5.2	2	03/05/2019	Title: ECCS RPV WATER INVENTORY CONTROL AND RCIC SYSTEM ECCS RPV WATER INVENTORY CONTROL AND RCIC MONITORING INSTRUMENTATION
TEXT 3.5.3	1	03/05/2019	Title: ECCS RPV WATER INVENTORY CONTROL AND RCIC SYSTEM LONG TERM NITROGEN SUPPLY TO ADS
TEXT 3.6.1	0	11/18/2002	Title: CONTAINMENT VENTING OR PURGING
TEXT 3.6.2	3	01/03/2019	Title: SUPPRESSION CHAMBER TO DRYWELL VACUUM BREAKER POSITION INDICATION
TEXT 3.6.3	0	11/18/2002	Title: CONTAINMENT SUPPRESSION POOL ALARM INSTRUMENTATION



## SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

TEXT 3.3.1	0	11/18/2002	Title: INSTRUMENTATION RADIATION MONITORING INSTRUMENTATION
TEXT 3.3.2	3	03/31/2011	Title: INSTRUMENTATION SEISMIC MONITORING INSTRUMENTATION
TEXT 3.3.3	2	11/09/2007	Title: INSTRUMENTATION METEOROLOGICAL MONITORING INSTRUMENTATION
TEXT 3.3.4	11	06/29/2017	Title: INSTRUMENTATION TRM POST-ACCIDENT MONITORING INSTRUMENTATION
TEXT 3.3.5	0	11/18/2002	Title: INSTRUMENTATION THIS PAGE INTENTIONALLY LEFT BLANK
TEXT 3.3.6	5	03/05/2019	Title: INSTRUMENTATION TRM ISOLATION ACTUATION INSTRUMENTATION
TEXT 3.3.7	2	11/10/2015	Title: INSTRUMENTATION MAIN TURBINE OVERSPEED PROTECTION SYSTEM
TEXT 3.3.8	1	10/22/2003	Title: INSTRUMENTATION INTENTIONALLY LEFT BLANK
TEXT 3.3.9	3	04/17/2008	Title: OPRM INSTRUMENTATION CONFIGURATION
TEXT 3.3.10	1	12/14/2004	Title: INSTRUMENTATION REACTOR RECIRCULATION PUMP MG SET STOPS
TEXT 3.3.11	1	10/22/2003	Title: INSTRUMENTATION MVP ISOLATION INSTRUMENTATION
TEXT 3.3.12	2	04/02/2019	Title: WATER MONITORING INSTRUMENTATION

# SSES MANUAL

Manual Name: TRM1

Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 1

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TEXT 2.2 Title: PLANT PROGRAMS AND SETPOINTS INSTRUMENT TRIP SETPOINT TABLE	10	01/31/2014		
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TEXT 3.1.1 Title: REACTIVITY CONTROL SYSTEMS ANTICIPATED TRANSIENT WITHOUT SCRAM ALTERNATE ROD INJECTION (ATWS-ARI) INSTRUMENTATION	1	11/09/2007		
TEXT 3.1.2 Title: REACTIVITY CONTROL SYSTEMS CONTROL ROD DRIVE (CRD) HOUSING SUPPORT	0	11/18/2002		
TEXT 3.1.3 Title: REACTIVITY CONTROL SYSTEMS CONTROL ROD BLOCK INSTRUMENTATION	6	12/18/2017		
TEXT 3.1.4 Title: REACTIVITY CONTROL SYSTEMS CONTROL ROD SCRAM ACCUMULATORS INSTRUMENTATION & CHECK VALVE	1	10/12/2020		
TEXT 3.2.1 Title: CORE OPERATING LIMIST REPORT (COLR)	20	04/07/2020		

## 3.1 Reactivity Control Systems

## 3.1.4 Control Rod Scram Accumulators Instrumentation and Check Valve

TRO 3.1.4 Each control rod scram accumulator's monitoring instrumentation and check valve shall be OPERABLE.

APPLICABILITY: MODES 1 and 2 when associated Scram Accumulator is OPERABLE.  
MODE 5 when needed to support LCO 3.9.5

## ACTIONS

## NOTE

Separate condition entry is allowed for each accumulator.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more accumulator check valve(s) inoperable.	A.1 Restore check valve to OPERABLE status.	Prior to entering MODE 2.
B. Loss of RDCS or the 4-rod display.	B.1 Perform TS SR 3.1.5.1 on all scram accumulators.	12 hours <u>AND</u> Once per 12 hours thereafter.
	<u>AND</u> B.2 Verify all scram accumulators free of water.	12 hours <u>AND</u> Once per 12 hours thereafter.

## ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>C. -----NOTE----- This condition does not apply during performance of accumulator charging.</p> <hr/> <p>One or more accumulator pressure detector(s)/alarm(s) inoperable for reasons other than Condition B.</p>	<p>C.1 Perform TS SR 3.1.5.1 on affected scram accumulator(s).</p>	<p>6 hours</p> <p><u>AND</u></p> <p>Once per 12 hours thereafter.</p>
<p>D. One or more accumulator leak detector(s) inoperable for reasons other than Condition B.</p>	<p>D.1 Verify affected scram accumulator(s) free of water.</p>	<p>6 hours</p> <p><u>AND</u></p> <p>Once per 12 hours thereafter.</p>
<p>E. Required Action and associated Completion Time of Condition A, B, C or D not met or scram accumulator pressure undetermined.</p>	<p>E.1 Declare the affected scram accumulator(s) inoperable.</p>	<p>Immediately</p>

## TECHNICAL REQUIREMENT SURVEILLANCE

## NOTE

When an accumulator pressure detector(s)/alarm(s) or accumulator leak detector(s) is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 1 hour provided the outage time is monitored.

SURVEILLANCE	FREQUENCY
TRR 3.1.4.1 Perform a CHANNEL FUNCTIONAL TEST of the leak detectors.	24 months
TRR 3.1.4.2 Perform a CHANNEL CALIBRATION of the pressure detectors; verify a pressure detector alarm setpoint of $\geq$ 940 psig on decreasing pressure.	24 months
TRR 3.1.4.3 Verify that each individual accumulator check valve maintains the associated accumulator pressure above the alarm set point for greater than or equal to 10 minutes with no control rod drive pump operating.	24 months

## B 3.1 REACTIVITY CONTROL SYSTEMS

## B 3.1.4 Control Rod Scram Accumulators Instrumentation and Check Valve

**BASES**

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TRO The scram accumulator stores sufficient energy to fully insert a control rod at lower vessel pressures. At higher vessel pressures the accumulator pressure is assisted or supplemented by reactor vessel pressure. The accumulator is hydraulic cylinder with a free-floating piston. The piston separates the water on top from the nitrogen below. A check valve in the accumulator charging line prevents loss of water pressure in the event supply pressure is lost. During normal plant operation, the accumulator piston is seated at the bottom of its cylinder. Loss of nitrogen decreases the nitrogen pressure, which actuates a pressure switch and sounds an alarm in the control room.

To ensure that the accumulator is always able to produce a scram, it is continuously monitored for water leakage. A float type level switch actuates an alarm if water leaks past the piston barrier and collects in the accumulator instrumentation block.

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**ACTIONS**

The Actions are defined to ensure proper corrective measures are taken in response to the inoperable components.

Increasing the TS Surveillance Requirement for each affected Scram Accumulator from once every 7 days to once every 12 hours will perform required Action B.1 or C.1. Blowing down each affected scram accumulator once every 12 hours to verify it is free of moisture will perform required Action B.2 or D.1.

When Condition B applies, a completion time of 12 hours is granted for initial performance of the Required Actions. This allows reasonable time for restoration of failed systems before testing takes place.

Entry into Condition C is not required for performance of accumulator charging since the required action results in accumulator charging.

When Condition C or D applies, a completion time of 6 hours is granted for initial performance of the Required Actions. This allows reasonable time for restoration of failed instrumentation before testing takes place.

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**BASES**

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**TRS**

The TRSs are defined to be performed at the specified Frequency to ensure that the Scram Accumulator Instrumentation and check valves are maintained OPERABLE.

The Surveillances are modified by a Note to indicate that when accumulator pressure detectors/alarms or accumulator leak detectors are placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to one hour provided the outage time is monitored. Upon completion of the Surveillance or expiration of the one-hour allowance, whichever is less, the detector/alarm must be returned to OPERABLE status or the applicable Condition(s) entered and Required Action(s) taken.

TRS 3.1.4.3

This test is intended to measure the ability of the accumulator check valve maintain the pressure necessary to insert the control rod after shutdown of the CRD charging water pump. The 10 minute period is to test the system's ability to maintain sufficient pressure from an initial value of > 1100 psig to < 1150 psig.

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**REFERENCES** 1. FSAR SECTION 4.6.1.1

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