

3.7 PLANT SYSTEMS

3.7.1 Main Steam Safety Valves (MSSVs)

LCO 3.7.1 Five MSSVs per steam generator shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each MSSV.  
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CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more steam generators with one MSSV inoperable and the Moderator Temperature Coefficient (MTC) zero or negative at all power levels.	A.1 Reduce THERMAL POWER to $\leq 58\%$ RTP.	4 hours
B. One or more steam generators with two or more MSSVs inoperable .  OR  One or more steam generators with one MSSV inoperable and the MTC positive at any power level.	B.1 Reduce THERMAL POWER to less than or equal to the Maximum Allowable % RTP specified in Table 3.7.1-1 for the number of OPERABLE MSSVs.  AND  -----NOTE----- Only required in MODE 1 ----- B.2 Reduce the Power Range Neutron Flux – High reactor trip setpoint to less than or equal to the Maximum Allowable % RTP specified in Table 3.7.1-1 for the number of OPERABLE MSSVs.	4 hours          36 hours
C. Required Action and associated Completion Time not met.  OR  One or more steam generators with $\geq 4$ MSSVs inoperable.	C.1 Be in MODE 3.  AND  C.2 Be in MODE 4.	6 hours       12 hours

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SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.1.1 -----NOTE-----            Not required to be performed until entering            MODES 2 from MODE 3.            -----</p> <p>Verify each required MSSV lift setpoint per Table            3.7.1-2 in accordance with the Inservice Testing            Program, Following testing, lift setting shall be            within <math>\pm 1\%</math>.</p>	<p>In accordance with            the Inservice            Testing Program.</p>

Table 3.7.1-1 (page 1 of 1)  
OPERABLE Main Steam Safety Valves versus  
Maximum Allowable Power

NUMBER OF OPERABLE MSSVs PER STEAM GENERATOR	MAXIMUM ALLOWABLE POWER (% RTP)
5	≤ 100
4	≤ 58
3	≤ 41
2	≤ 24

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Table 3.7.1-2 (page 1 of 1)  
Main Steam Safety Valve Lift Settings

VALVE NUMBER			LIFT SETTING (± 3%) <sup>(a)</sup>
STEAM GENERATOR			
#1	#2	#3	
1. psv 102	202	302	83.31 kg/cm <sup>2</sup> (1185 psig)
2. psv 103	203	303	84.72 kg/cm <sup>2</sup> (1205 psig)
3. psv 104	204	304	86.13 kg/cm <sup>2</sup> (1225 psig)
4. psv 105	205	305	87.18 kg/cm <sup>2</sup> (1240 psig)
5. psv 106	206	306	88.24 kg/cm <sup>2</sup> (1255 psig)

- a. The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure.

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3.7.2 Main Steam Isolation Valves (MSIVs)

LCO 3.7.2 Three MSIVs and their associated actuator trains shall be OPERABLE.

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APPLICABILITY: MODE 1,  
MODES 2 and 3 except when all MSIVs are closed and de-activated.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One MSIV actuator train inoperable.	A.1 Restore MSIV actuator train to OPERABLE status.	7 days
B. Two MSIV actuator trains inoperable for different MSIVs when the inoperable actuator trains are <u>not</u> in the same separation group.	B.1 Restore one MSIV actuator train to OPERABLE status.	72 hours
C. Two MSIV actuator trains inoperable for different MSIVs when the inoperable actuator trains <u>are</u> in the same separation group.	C.1 Restore one MSIV actuator train to OPERABLE status.	6 hours
D. Two actuator trains for one MSIV inoperable.	D.1 Declare the affected MSIV inoperable. <u>AND</u> D.2 -----NOTE----- Perform Require Action D.2 only operation under Conditions F or H . ----- Enter Conditions F or H.	Immediately        Immediately

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ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>E. Three or more actuator trains inoperable.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition A, B, or C not met.</p>	<p>E.1 Declare each affected MSIV inoperable.</p> <p><u>AND</u></p> <p>E.2 -----NOTE----- Perform Require Action E.2 only operation under Conditions F or H . ----- Enter Conditions F or H.</p>	<p>Immediately</p> <p>Immediately</p>
<p>F. One MSIV inoperable in MODE 1.</p>	<p>F.1 Restore MSIV to OPERABLE status.</p>	<p>8 hours</p>
<p>G. Required Action and associated Completion Time of Condition F not met.</p>	<p>G.1 Be in MODE 2.</p>	<p>6 hours</p>
<p>H. -----NOTE----- Separate Condition entry is allowed for each MSIV. -----  One or more MSIVs inoperable in MODE 2 or 3.</p>	<p>H.1 Close MSIV.</p> <p><u>AND</u></p> <p>H.2 Verify MSIV is closed.</p>	<p>8 hours</p> <p>Once per 7 days</p>
<p>I. Required Action and associated Completion Time of Condition H not met.</p>	<p>I.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>I.2 Be in MODE 4.</p>	<p>6 hours</p> <p>12 hours</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.2.1 -----NOTE-----  Only required to be performed in MODE 1 and 2.  -----  Verify the isolation time of each MSIV is <math>\leq 5</math> seconds from each actuator train.</p>	<p>In accordance with the Inservice Testing Program</p>
<p>SR 3.7.2.2 -----NOTE-----  Only required to be performed in MODE 1 and 2.  -----  Verify each actuator train actuates the MSIV to the isolation position on an actual or simulated actuation signal.</p>	<p>18 months</p>

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3.7 PLANT SYSTEMS

3.7.3 Main Feedwater Isolation Valves (MFWIVs) and Main Feedwater Control Valves (MFWCVs) and Associated Bypass Valves

LCO 3.7.3 Three MFWIVs and their associated actuator trains, three MFWCVs, and associated bypass valves shall be OPERABLE.

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APPLICABILITY: MODES 1, 2, and 3 except when MFWIV, or MFWCV and associated bypass valve is closed and de-activated or isolated by a closed manual valve.

ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each valve.  
-----

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One MFWIV actuator train inoperable.	A.1 Restore MFWIV actuator train to OPERABLE status.	7 days
B. Two MFWIV actuator trains inoperable for different MFWIVs when the inoperable actuator trains are <u>not</u> in the same separation group.	B.1 Restore one MFWIV actuator train to OPERABLE status.	72 hours
C. Two MFWIV actuator trains inoperable for different MFWIVs when the inoperable actuator trains <u>are</u> in the same separation group.	C.1 Restore one MFWIV actuator train to OPERABLE status.	6 hours
D. Two actuator trains for one MFWIV inoperable.	D.1 Declare the affected MFWIV inoperable. <u>AND</u> D.2 Enter Condition F.	Immediately  Immediately

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ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Three or more actuator trains inoperable.  <u>OR</u>  Required Action and associated Completion Time of Condition A, B, or C not met.	E.1 Declare each affected MFWIV inoperable.	Immediately
	<u>AND</u>  E.2 Enter Condition F.	Immediately
F. One or more MFWIVs inoperable.	F.1 Close or isolate MFWIV.	72 hours
	<u>AND</u>  F.2 Verify MFWIV is closed or isolated.	Once per 7 days
G. One or more MFWCVs inoperable.	G.1 Close or isolate MFWCV.	72 hours
	<u>AND</u>  G.2 Verify MFWCV is closed or isolated.	Once per 7 days

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ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
H. One or more MFWCV bypass valves inoperable.	H.1 Close or isolate bypass valve.	72 hours
	<u>AND</u> H.2 Verify bypass valve is closed or isolated.	Once per 7 days
I. Two valves in the same flow path inoperable.	I.1 Isolate affected flow path.	8 hours
J. Required Action and associated Completion Time of Condition F, G, H, or I not met.	J.1 Be in MODE 3	6 hours
	<u>AND</u> J.2 Be in MODE 4.	12 hours

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SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.3.1      Verify the closure time of each MFWIV is $\leq 5$ seconds from each actuator train, each MFWCV and associated bypass valve $\leq 10$ seconds on an actual or simulated actuation signal.	In accordance with the Inservice Testing Program or 18 months

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3.7 PLANT SYSTEMS

3.7.4 Steam Generator Power - operated Relief Valves (SG PORVs)

LCO 3.7.4 One SG PORV line per SG shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3,  
MODE 4 when steam generator is relied upon for heat removal.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required SG PORV line inoperable.	A.1 -----NOTE----- LCO 3.0.4 is not applicable. -----  Restore required SG PORV line to OPERABLE status.	7 days
B. Two or more required SG PORV lines inoperable.	B.1 Restore one SG PORV line to OPERABLE status.	24 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.  <u>AND</u>  C.2 Be in MODE 4 without reliance upon steam generator for heat removal.	6 hours     18 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.4.1	Verify one complete cycle of each SG PORV.	18 months
SR 3.7.4.2	Verify one complete cycle of each SG PORV block valve.	18 months

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3.7.5 Auxiliary Feedwater (AFW) System

LCO 3.7.5 Three AFW trains shall be OPERABLE.

-----NOTE-----  
Only one AFW train, which includes a motor driven pump, is required to be OPERABLE in MODE 4.  
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APPLICABILITY: MODES 1, 2, and 3,  
MODE 4 when steam generator is relied upon for heat removal.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One steam supply to turbine driven AFW pump inoperable.	A.1 Restore steam supply to OPERABLE status.	7 days <u>AND</u> 10 days from discovery of failure to meet the LCO
B. One AFW train inoperable in MODE 1, 2 or 3 [for reasons other than Condition A].	B.1 Restore AFW train to OPERABLE status.	72 hours <u>AND</u> 10 days from discovery of failure to meet the LCO

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ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>C. Required Action and associated Completion Time for Condition A or B not met.</p> <p><u>OR</u></p> <p>Two AFW trains inoperable in MODE 1, 2, or 3.</p>	<p>C.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>C.2 Be in MODE 4.</p>	<p>6 hours</p> <p>18 hours</p>
<p>D. Three AFW trains inoperable in MODE 1, 2, or 3.</p>	<p>D.1 -----NOTE-----                      LCO 3.0.3 and all other LCO Required Actions requiring MODE changes are suspended until one AFW train is restored to OPERABLE status.                      -----                      Initiate action to restore one AFW train to OPERABLE status.</p>	<p>Immediately</p>
<p>E. Required AFW train inoperable in MODE 4.</p>	<p>E.1 Initiate action to restore AFW train to OPERABLE status.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.1      Verify each AFW manual, power operated, and automatic valve in each water flow path, and in both steam supply flow paths to the steam turbine driven pump, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	<p>31 days</p>
<p>SR 3.7.5.2      -----NOTE----- Not required to be performed for the turbine driven AFW pump until 24 hours after <math>\geq 70.31\text{kg/cm}^2</math> (1000 psig )in the steam generator. -----  Verify the developed head of each AFW pump at the flow test point is greater than or equal to the required developed head.</p>	<p>31 days on a STAGGERED TEST BASIS and In accordance with the Inservice Testing Program</p>
<p>SR 3.7.5.3      -----NOTE----- Not applicable in MODE 4 when steam generator is relied upon for heat removal. -----  Verify each AFW automatic valve that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.</p>	<p>18 months</p>

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SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.4 -----NOTE-----</p> <ol style="list-style-type: none"> <li>1. Not required to be performed for the turbine driven AFW pump until 24 hours after <math>\geq 70.31 \text{ kg/m}^2</math> (1000 psig) in the steam generator.</li> <li>2. Not applicable in MODE 4 when steam generator is relied upon for heat removal.</li> </ol> <p>-----</p> <p>Verify each AFW pump starts automatically on an actual or simulated actuation signal.</p>	<p>18 months</p>
<p>SR 3.7.5.5 -----NOTE-----</p> <p>Not required to be performed for the turbine driven AFW pump until 24 hours after <math>\geq 70.31 \text{ kg/cm}^2</math> (1000 psig) in the steam generator.</p> <p>-----</p> <p>Verify proper alignment of the required AFW flow paths by verifying flow from the condensate storage tank to each steam generator.</p>	<p>Prior to entering MODE 2, whenever unit has been in MODE 5 or 6 for &gt; 30 days</p>



3.7 PLANT SYSTEMS

3.7.6 Condensate Storage Tank (CST)

LCO 3.7.6 The CST level shall be  $\geq 460,285$  gal (6.51M, 54.24%).

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APPLICABILITY: MODES 1, 2, and 3,  
MODE 4 when steam generator is relied upon for heat removal.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. CST level not within limit.	A.1 Verify by administrative means OPERABILITY of backup water supply.  <u>AND</u>  A.2 Restore CST level to within limit.	4 hours  <u>AND</u>  Once per 12 hours thereafter  7 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.  <u>AND</u>  B.2 Be in MODE 4, without reliance on steam generator for heat removal.	6 hours  18 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.6.1 Verify the CST level is $\geq 460,285$ gal (6.51M, 54.24%).	12 hours

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3.7 PLANT SYSTEMS

3.7.7 Component Cooling Water (CCW) System

LCO 3.7.7 Two CCW trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CCW train inoperable.	<p>A.1 -----NOTE-----  Enter applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops - MODE 4," for residual heat removal loops made inoperable by CCW.  -----  Restore CCW train to OPERABLE status.</p>	72 hours
B. Required Action and associated Completion Time of Condition A not met.	<p>B.1 Be in MODE 3.  <u>AND</u>  B.2 Be in MODE 5.</p>	<p>6 hours    36 hours</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.7.1 -----NOTE----- Isolation of CCW flow to individual components does not render the CCW System inoperable. ----- Verify each CCW manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	<p>31 days</p>
<p>SR 3.7.7.2 Verify each CCW automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.</p>	<p>18 months</p>
<p>SR 3.7.7.3 Verify each CCW pump starts automatically on an actual or simulated actuation signal.</p>	<p>18 months</p>

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3.7.8 Nuclear Service Cooling Water (NSCW) system

LCO 3.7.8 Two NSCW trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One pump inoperable in any one train	A.1 Restore the Inoperable pump to OPERABLE status.	31 days
B. One pump inoperable in each train.	B.1 Restore one Inoperable pump of any train to OPERABLE status	7 days
C. One NSCW train inoperable.	C.1 -----NOTE----- 1. Enter applicable Conditions and Required Actions of LCO 3.8.1, "AC Sources - Operating," for emergency diesel generator made inoperable by NSCW. 2. Enter applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops - MODE 4," for residual heat removal loops made inoperable by NSCW. ----- Restore NSCW train to OPERABLE status.	72 hours
D. The travelling screen and screen wash system in either loop inoperable.	D.1 Restore the travelling screen and screen wash system to OPERABLE status.	7 days

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ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. The travelling screen and screen wash system in both loops inoperable.	E.1 Restore one Inoperable loop to OPERABLE status	72 hours
F. Required Action and associated Completion Time of Condition A, B , C , D , or E not met.	F.1 Be in MODE 3.	6 hours
	<u>AND</u> F.2 Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.8.1 -----NOTE----- Isolation of NSCW flow to individual components does not render the NSCW inoperable. ----- Verify each NSCW manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	31 days
SR 3.7.8.2 Verify each NSCW automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	18 months
SR 3.7.8.3 Verify each NSCW pump starts automatically on an actual or simulated actuation signal.	18 months

### 3.7 PLANT SYSTEMS

#### 3.7.9 Ultimate Heat Sink (UHS)

LCO 3.7.9 The UHS shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. UHS inoperable.	A.1 Be in MODE 3.	6 hours
	<u>AND</u> A.2 Be in MODE 5.	36 hours

#### SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.9.1 Verify water level of UHS is $\geq -2.13$ meters (-7.0 ft) mean sea level.	24 hours
SR 3.7.9.2 Verify average water temperature of UHS is $\leq 32.2^{\circ}\text{C}$ ( $90^{\circ}\text{F}$ )	24 hours

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3.7.10 Control Room Emergency Ventilation System (CREVS)

LCO 3.7.10 Two CREVS trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, 4,  
During movement of irradiated fuel assemblies, and  
During CORE ALTERATIONS.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CREVS train inoperable.	A.1 Restore CREVS train to OPERABLE status.	7 days
B. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4.	B.1 Be in MODE 3.	6 hours
	<u>AND</u> B.2 Be in MODE 5.	36 hours
C. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies, or during CORE ALTERATIONS.	C.1 Place OPERABLE CREVS train in emergency mode.	Immediately
	<u>OR</u> C.2.1 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u> C.2.2 Suspend movement of irradiated fuel assemblies.	Immediately

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ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Two CREVS trains inoperable during movement of irradiated fuel assemblies, or during CORE ALTERATIONS.	D.1 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u> D.2 Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREVS trains inoperable in MODE 1, 2, 3, or 4.	E.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.10.1 Operate each CREVS train for $\geq 10$ continuous hours with the heaters operating.	31 days
SR 3.7.10.2 Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with VFTP
SR 3.7.10.3 Verify each CREVS train actuates on an actual or simulated actuation signal.	18 months
SR 3.7.10.4 Verify one CREVS train can maintain a positive pressure of $\geq 0.317$ cm (0.125 inches) water gauge, relative to the outside atmosphere during the pressurization mode of operation at a makeup flow rate of $\leq 2000$ ft <sup>3</sup> /min $\pm 10\%$ . (56.64m <sup>3</sup> /min $\pm 10\%$ )	18 months on a STAGGERED TEST BASIS
SR 3.7.10.5 Verify each CREVS train has the capability to remove the assumed heat load.	18 months

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### 3.7 PLANT SYSTEMS

#### 3.7.11 Essential Chilled Water (EChW) System

LCO 3.7.11 Two EChW trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One EChW train inoperable	A.1 Restore EchW train to OPERABLE status.	72 hours
B. Required Action and associated Completion Time of Condition A not met.	B.1 Be in MODE 3.	6 hours
	<u>AND</u> B.2 Be in MODE 5.	36 hours

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	<p>-----NOTE----- Isolation of EChW flow to individual components does not render the EChW System inoperable. -----</p> <p>Verify each EChW manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	31 days
SR 3.7.11.2	Verify operation of the EChW pump and chiller start by a manual actuation signal.	92 days
SR 3.7.11.3	Verify each EChW automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	18 months
SR 3.7.11.4	Verify each EChW pump and chiller start automatically on an actual or simulated actuation signal, and the system functions within its design performance parameters.	18 months

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3.7.12 Secondary Specific Activity

LCO 3.7.12 The specific activity of the secondary coolant shall be  $\leq 0.10$   $\mu$  Ci/gm DOSE EQUIVALENT I-131.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Specific activity not within limit.	A.1 Be in MODE 3.	6 hours
	<u>AND</u> A.2 Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.12.1 Verify the specific activity of the secondary coolant is $\leq 0.10$ $\mu$ Ci/gm DOSE EQUIVALENT I-131.	31 days

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3.7.13 Fuel Building Emergency Ventilation System (FBEVS)

LCO 3.7.13 Two FBEVS trains shall be OPERABLE.

-----NOTE-----  
The fuel building boundary may be opened intermittently under administrative control.  
-----

APPLICABILITY: MODES 1, 2, 3, and 4,  
During movement of irradiated fuel assemblies in the fuel building.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One FBEVS train inoperable.	A.1 Restore FBEVS train to OPERABLE status.	7 days
B. Two FBEVS trains inoperable due to inoperable fuel building boundary in MODE 1, 2,3, or 4.	B.1 Restore fuel building boundary to OPERABLE status.	24 hours
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, 3, or 4.  <u>OR</u>  Two FBEVS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	C.1 Be in MODE 3.  <u>AND</u>  C.2 Be in MODE 5.	6 hours    36 hours

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ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the fuel building.	D.1 Place OPERABLE FBEVS train in operation.	Immediately
	<u>OR</u> D.2 Suspend movement of irradiated fuel assemblies in the fuel building.	Immediately
E. Two FBEVS trains inoperable during movement of irradiated fuel assemblies in the fuel building.	E.1 Suspend movement of irradiated fuel assemblies in the fuel building.	Immediately

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SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.13.1 Operate each FBEVS train for $\geq 10$ continuous hours with the heaters operating.	31 days
SR 3.7.13.2 Perform required FBEVS filter testing in accordance with the Ventilation Filter Testing Program.	In accordance with the VFTP
SR 3.7.13.3 Verify each FBEVS train actuates on an actual or simulated actuation signal.	18 months
SR 3.7.13.4 Verify one FBEVS train can maintain a pressure $\leq -6.35\text{mm}(-0.25\text{in})$ water gauge for fuel building and $\leq -0.51\text{mm}(-0.02\text{in})$ water gauge for ESF pump rooms with respect to atmospheric pressure during the post accident mode of operation at a flow rate $\leq 5000 \pm 10\%$ cfm.	18 months on a STAGGERED TEST BASIS

### 3.7 PLANT SYSTEMS

#### 3.7.14 Site Dewatering System

LCO 3.7.14 The water level in the dewatering system sumps shall not exceed elevation 23.77m (78 feet-0 inches).

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. The water level above elevation 23.77 m (78 feet-0 inches) in any one or more of the dewatering system sumps.	A.1 Restore the water level within the limit.	14 days
	<u>AND</u> A.2 Check the water level	once per 24 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	6 hours
	<u>AND</u> B.2 Be in MODE 5.	36 hours

#### SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.14.1 Verify the water level in all dewatering system sumps below elevation 23.77 m (78 feet-0 inches).	31 days

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3.7.15 Spent Fuel Pool Water Level

LCO 3.7.15 The spent fuel pool water level shall be  $\geq 7.01\text{m}$  (23 ft) over the top of irradiated fuel assemblies seated in the storage racks.

APPLICABILITY: During movement of irradiated fuel assemblies in the spent fuel pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Spent fuel pool water level not within limit.	<p>A.1 -----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p>Suspend movement of irradiated fuel assemblies in the spent fuel pool.</p>	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.15.1 Verify the spent fuel pool water level is $\geq 7.01\text{m}$ (23 ft) above the top of the irradiated fuel assemblies seated in the storage racks.	7 days

3.7 PLANT SYSTEMS

3.7.16 Spent Fuel Pool Boron Concentration

LCO 3.7.16 The spent fuel pool boron concentration shall be  $\geq 2000$  ppm.

APPLICABILITY: Whenever fuel assemblies are stored in the spent fuel pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Spent fuel pool boron concentration not within limit.	-----NOTE----- - LCO 3.0.3 is not applicable. -----	Immediately
	-  A.1 Suspend movement of fuel assemblies in the spent fuel pool.  <u>AND</u>  A.2 Initiate action to restore spent fuel pool boron concentration to within limit.	

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.16.1 Verify the spent fuel pool boron concentration is within limit.	7 days  <u>AND</u>  After the addition of water with boron concentration less than 2000 ppm to the spent fuel pool.



### 3.7 PLANT SYSTEMS

#### 3.7.17 Spent Fuel Assembly Storage

LCO 3.7.17 The combination of initial enrichment and burnup of each spent fuel assembly stored in Region 2 shall be within the Category A Domain of Figure 3.7.17-1 or in accordance with Specification 4.5.1.1.

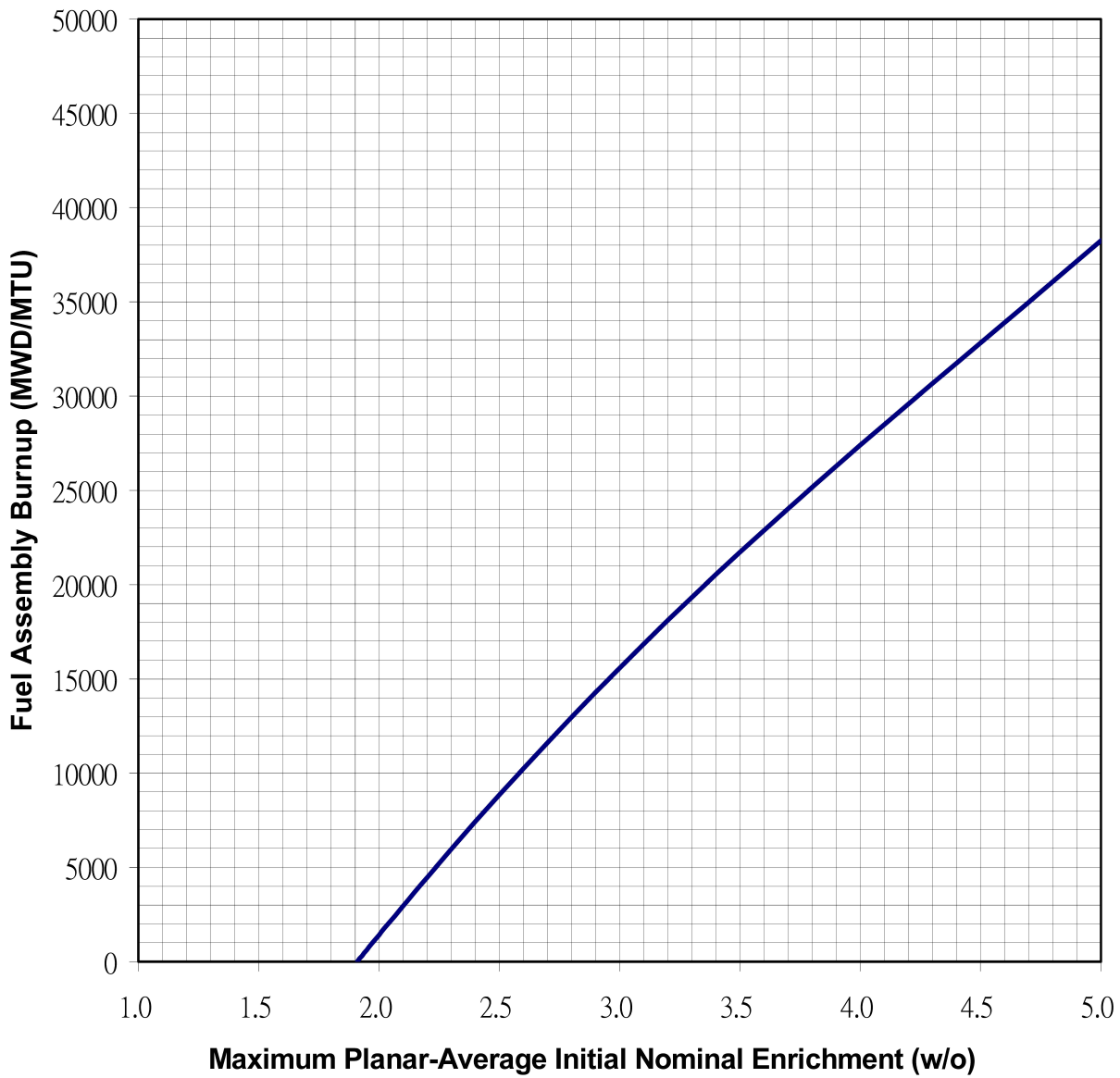
APPLICABILITY: Whenever any fuel assembly is stored in Region 2 of the spent fuel pool.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Requirements of the LCO not met.	<p>A.1 -----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p>Initiate action to move the noncomplying fuel assemblies to allowable locations in the spent fuel pool.</p>	Immediately

#### SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.17.1 Verify by administrative means the initial enrichment and burnup of the fuel assembly is in accordance with Figure 3.7.17-1 or Specification 4.5.1.1.	Prior to storing the fuel assembly in Region 2



台湾電力公司  
Maximum Planar-Average Initial Nominal Enrichment (w/o)  
TAIWAN POWER COMPANY  
MAANSHAN NUCLEAR POWER STATION UNITS NO. 1 & 2  
FSAR  
REGION 2 BURNUP VERSUS ENRICHMENT CURVE  
Figure 3.7.17-1