EXAMPLE 1.4-1

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Perform CHANNEL CHECK.	12 hours

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 12 hours, an extension of the time interval to 1.25 times the stated Frequency is allowed by SR 3.0.2 for operational flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Example 1.4-3), then SR 3.0.3 becomes applicable.

If the interval as specified by SR 3.0.2 is exceeded while the unit is not in a MODE or other specified condition in the Applicability of the LCO for which performance of the SR is required, the Surveillance must be performed within the Frequency requirements of SR 3.0.2 prior to entry into the MODE or other specified condition except as provided in SR 3.0.4.

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.4 When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time, or

b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate; exceptions to this Specification are stated in the individual Specifications, or

c. When a note is inserted in the individual value, parameter, or other Specification, that allows application of this part.

This Specification shall not prevent changes in MODEs or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

LCO 3.0.5 Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

LCO 3.0.6 When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, additional evaluations and limitations may be required in accordance with Specification 5.5.15, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

LCO 3.0.7

Special test exception (STE) LCOs in each applicable LCO section allow specified Technical Specification (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with STE LCOs is optional. When an STE LCO is desired to be met but is not met, the ACTIONS of the STE LCO shall be met. When an STE LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications.

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

SR 3.0.4

Entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4.

This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of the shutdown of the unit.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One or more Functions with two RPS bistable trip units or associated measurement channels inoperable except for Condition C (excore channel not calibrated with incore detectors).	B.1 Place one affected bistable trip unit in bypass and place the other affected bistable trip unit in trip. AND B.2 Restore one affected bistable trip unit and associated measurement channel to OPERABLE status.	1 hour 48 hours
C. One or more Functions with one or more power range excore channels not calibrated with the incore detectors.	C.1 Perform SR 3.3.1.3. OR C.2 Restrict THERMAL POWER to < 90% RTP.	24 hours 24 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
E. One or more Functions with two automatic bypass removal feature channels inoperable.	E.1	Disable bypass channels.	1 hour
	OR		
	E.2.1	Place one affected bistable trip unit in bypass and place the other in trip for each affected trip Function.	1 hour
		AND	
	E.2.2	Restore one automatic bypass removal feature and the affected bistable trip unit to OPERABLE status for each affected trip Function.	48 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. (Continued)	A.2.2	Place affected bistable trip unit in trip.	48 hours
B. Two Rate of Change of Power-High bistable trip units or associated measurement channels inoperable.	B.1	Place one bistable trip unit in bypass and place the other bistable trip unit in trip.	1 hour
	AND		
	B.2	Restore one bistable trip unit to OPERABLE status.	48 hours
C. One automatic bypass removal feature inoperable.	C.1	Disable bypass channel.	1 hour
	OR		
	C.2.1	Place affected bistable trip unit in bypass or trip.	1 hour
	AND		

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (Continued)	C.2.2.1 Restore automatic bypass removal feature and affected bistable trip unit to OPERABLE status. OR C.2.2.2 Place affected bistable trip unit in trip.	48 hours 48 hours
D. Two automatic bypass removal features inoperable.	D.1 Disable bypass channels. OR D.2.1 Place one affected bistable trip unit in bypass and place the other in trip. AND D.2.2 Restore one automatic bypass removal feature and the affected bistable trip unit to OPERABLE status.	1 hour 1 hour 48 hours
E. Required Action and associated Completion Time not met.	E.1 Open all reactor trip circuit breakers.	6 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.2.1	Perform a CHANNEL CHECK of each Wide Range Logarithmic Neutron Flux Monitor.	12 hours
SR 3.3.2.2	Perform a CHANNEL FUNCTIONAL TEST on the Rate of Change of Power trip instrument channel. The allowable value shall be ≤ 2.6 dpm.	Once within 7 days prior to each reactor startup
SR 3.3.2.3	Perform a CHANNEL FUNCTIONAL TEST on each automatic bypass removal feature.	24 months
SR 3.3.2.4	----------NOTE---------- Neutron detectors are excluded from CHANNEL CALIBRATION. ---------- Perform a CHANNEL CALIBRATION, including automatic bypass removal features.	24 months

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One or more Functions with two ESFAS sensor modules or associated measurement channels inoperable.	B.1 Place one sensor module in bypass and place the other sensor module in trip. AND B.2 Restore one sensor module and associated measurement channel to OPERABLE status.	1 hour 48 hours
C. One or more Functions with the automatic block removal feature of one sensor block module inoperable.	C.1 Disable affected sensor block module. OR C.2 Place affected sensor block module in bypass.	1 hour 1 hour

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. One or more Functions with the automatic block removal feature of two sensor block modules inoperable.	D.1 Disable affected sensor block modules. OR	1 hour
	D.2.1 Place one affected sensor block module in bypass and disable the other for each affected ESFAS Function. AND	1 hour
	D.2.2 Restore one automatic block removal feature and the associated sensor block module to OPERABLE status for each affected ESFAS Function.	48 hours
E. Required Action and associated Completion Time not met.	E.1 Be in MODE 3. AND	6 hours
	E.2 Be in MODE 4.	12 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One or more Functions with two sensor modules or associated measurement channels per DG inoperable.	B.1 Enter applicable Conditions and Required Actions for the associated DG made inoperable by DG-LOVS instrumentation.	1 hour
	OR	
	B.2.1 Place one sensor module in bypass and the other sensor module in trip.	1 hour
	AND	
	B.2.2 Restore one sensor module and associated measurement channel to OPERABLE status.	48 hours
C. One or more Functions with more than two sensor modules or associated measurement channels inoperable.	C.1 Restore at least two sensor modules and associated measurement channels to OPERABLE status.	1 hour

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Two CVCS isolation sensor modules or associated measurement channels inoperable.	C.1 Place one sensor module in bypass and place the other sensor module in trip. AND C.2 Restore one sensor module and associated measurement channel to OPERABLE status.	1 hour 48 hours
D. Required Action and associated Completion Time not met.	D.1 Be in MODE 3. AND D.2 Be in MODE 5.	6 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.9.1	Perform a CHANNEL CHECK of each sensor channel.	12 hours

3.3 INSTRUMENTATION

3.3.10 Post-Accident Monitoring (PAM) Instrumentation

LCO 3.3.10 The PAM indication channels for each Function in Table 3.3.10-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

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

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions with one required indication channel inoperable.	A.1 Restore required indication channel to OPERABLE status.	30 days
B. Required Action and associated Completion Time of Condition A not met.	B.1 Initiate action in accordance with Specification 5.6.7.	Immediately

3.3 INSTRUMENTATION

3.3.11 Remote Shutdown Instrumentation

LCO 3.3.11 The Remote Shutdown Instrumentation Functions in Table 3.3.11-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

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

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required Functions inoperable.	A.1 Restore required Functions to OPERABLE status.	30 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	6 hours 12 hours

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.11 Pressurizer Power-Operated Relief Valves (PORVs)

LCO 3.4.11 Two PORVs and associated block valves shall be OPERABLE.

APPLICABILITY: MODES 1 and 2,
MODE 3 with all RCS cold leg temperatures > 365°F (Unit 1),
> 301°F (Unit 2).

ACTIONS

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

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or two PORVs inoperable and capable of being manually cycled.	A.1 Close and maintain power to associated block valve.	1 hour

Figure 3.4.12-1 when the SDC System is not in operation and PORV lift setting ≤ 429 psia (Unit 1), ≤ 443 psia (Unit 2), when the SDC is in operation; and an RCS vent of ≥ 1.3 square inches established; or

3. An RCS vent of ≥ 2.6 square inches established.

APPLICABILITY: MODE 3 with any RCS cold leg temperature ≤ 365°F (Unit 1), ≤ 301°F (Unit 2),
MODES 4, 5, and 6.

---------- NOTE ----------
This Specification is not applicable when the RCS is vented to ≥ 8 square inches.

ACTIONS

----------NOTE----------
LCO 3.0.4.b is not applicable to PORVs when entering MODE 3.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more HPSI pumps capable of automatically injecting into the RCS. OR Two or more HPSI pumps capable of manually injecting into the RCS.	A.1 Initiate action to verify a maximum of one HPSI pump only capable of manually injecting into the RCS and no HPSI pumps capable of automatically injecting into the RCS.	Immediately

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. HPSI flow > 210 gpm and suction aligned to refueling water tank. AND RCS vent < 2.6 square inches established.	B.1 Initiate action to reduce flow to ≤ 210 gpm.	Immediately
C. One or more HPSI loop MOVs capable of automatically aligning HPSI pump flow to the RCS.	C.1 Initiate action to verify HPSI loop MOVs are only capable of manually aligning HPSI pump flow to the RCS.	Immediately
D. One of two required PORVs inoperable in MODE 3 with any RCS cold leg temperature ≤ 365°F (Unit 1), ≤ 301°F (Unit 2), or MODE 4. AND RCS vent < 1.3 square inches established.	D.1 Restore required PORV to OPERABLE status.	5 days

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. One of two required PORVs inoperable in MODE 5 or 6. AND RCS vent < 1.3 square inches established.	E.1 Restore required PORV to OPERABLE status.	24 hours
F. Required Action and associated Completion Time of Condition D or E not met.	F.1 Depressurize RCS and establish RCS vent ≥ 1.3 square inches.	48 hours
G. All required PORVs inoperable.	G.1 Depressurize RCS and establish RCS vent of ≥ 2.6 square inches.	48 hours

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.14 RCS Leakage Detection Instrumentation

LCO 3.4.14 The following RCS leakage detection instrumentation shall be OPERABLE:

a. One containment sump level alarm; and

b. One containment atmosphere radioactivity monitor (gaseous or particulate).

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Required containment sump level alarm inoperable.	A.1 Perform SR 3.4.13.1.	Once per 24 hours
	AND	
	A.2 Restore containment sump level alarm to OPERABLE status.	30 days

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.15 RCS Specific Activity

LCO 3.4.15 The specific activity of the reactor coolant shall be within limits.

APPLICABILITY: MODES 1 and 2,
MODE 3 with RCS average temperature (T_{avg}) ≥ 500°F.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. DOSE EQUIVALENT I-131 > 1.0 μCi/gm.	---------- NOTE ---------- LCO 3.0.4.c is applicable. ----------	
	A.1 Verify DOSE EQUIVALENT I-131 within the acceptable region of Figure 3.4.15-1.	Once per 4 hours
	AND	
	A.2 Restore DOSE EQUIVALENT I-131 to within limit.	100 hours

3.5 EMERGENCY CORE COOLING SYSTEM (ECCS)

3.5.3 ECCS - Shutdown

LCO 3.5.3 One high pressure safety injection (HPSI) train shall be OPERABLE.

---NOTE---

When Reactor Coolant System cold leg temperatures are < 385°F (Unit 1), < 325°F (Unit 2) during heatup or cooldown and when ≤ 365°F (Unit 1), ≤ 301°F (Unit 2), during other conditions, the HPSI train is not required to be capable of automatically starting on an actuation signal.

APPLICABILITY: MODE 3 with pressurizer pressure < 1750 psia,
MODE 4.

ACTIONS

---NOTE---

LCO 3.0.4.b is not applicable to ECCS High Pressure Safety Injection subsystem when entering MODE 4.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Required HPSI train inoperable.	A.1 Restore required HPSI train to OPERABLE status.	1 hour
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 5.	24 hours

3.7 PLANT SYSTEMS

3.7.3 Auxiliary Feedwater (AFW) System

LCO 3.7.3 Two AFW trains shall be OPERABLE.

---------- NOTE ----------
AFW trains required for OPERABILITY may be taken out of service under administrative control for the performance of periodic testing.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

----------NOTE----------
LCO 3.0.4.b is not applicable.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One steam-driven AFW pump inoperable.	A.1 Align remaining OPERABLE steam-driven pump to automatic initiating status. AND A.2 Restore steam-driven pump to OPERABLE status.	72 hours 7 days AND 10 days from discovery of failure to meet the Limiting Condition for Operation (LCO)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One motor-driven AFW pump inoperable.	B.1 Align standby steam-driven pump to automatic initiating status. AND	72 hours
	B.2 Restore motor-driven pump to OPERABLE status.	7 days AND 10 days from discovery of failure to meet the LCO
C. Two AFW pumps inoperable.	C.1 Align remaining OPERABLE pump to automatic initiating status. AND	1 hour
	C.2 Verify the other unit's motor-driven AFW pump is OPERABLE. AND	1 hour
	C.3 Verify, by administrative means, the cross-tie valve to the opposite unit is OPERABLE. AND	1 hour

ACTIONS

NOTE

LCO 3.0.4.b is not applicable to DGs.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required LCO 3.8.1.a offsite circuit inoperable.	A.1 Perform SR 3.8.1.1 or SR 3.8.1.2 for required OPERABLE offsite circuits.	1 hour AND Once per 8 hours thereafter
	AND	
	A.2 Declare required feature(s) with no offsite power available inoperable when its redundant required feature(s) is inoperable.	24 hours from discovery of no offsite power to one train concurrent with inoperability of redundant required feature(s)
	AND	
	A.3 Restore required offsite circuit to OPERABLE status.	72 hours AND 17 days from discovery of failure to meet LCO 3.8.1.a or LCO 3.8.1.b