ATTACHMENT IV

PROPOSED TECHNICAL SPECIFICATION CHANGES

CURRENT TECHNICAL SPECIFICATIONS

9802120252 980204
PDR ADOCK 05000482
P PDR

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
6. Auxiliary Feedwater					
a. Manual Initiation	3(1/pump)	1/pump	1/pump	1, 2, 3	24
b. Automatic Actuation Logic and Actuation Relays (SSPS)	2	1	2	1, 2, 3	29
c. Automatic Actuation Logic and Actuation Relays (BOP ESFAS)	2	1	2	1, 2, 3	21
d. Stm. Gen. Water Level-Low-Low					
1) Start Motor-Driven Pumps	4/stm. gen.	2/stm. gen. in any operating stm. gen.	3/stm. gen. in each operating stm. gen.	1, 2, 3	28*
2) Start Turbine-Driven Pump	4/stm. gen.	2/stm. gen. in any 2 operating stm. gen.	3/stm. gen. in each operating stm. gen.	1, 2, 3	28*
e. Safety Injection - Start ~~Motor-Driven Pumps~~	See Item 1. above for all Safety Injection initiating functions and requirements.				
f. Loss-of-Offsite Power - Start Turbine-Driven Pump	~~2~~	~~1~~	~~2~~	~~1,2,3~~	~~22~~
1) 4kV Bus Undervoltage - Loss of Voltage	4/Bus	2/Bus	3/Bus	1,2,3	19*
2) Automatic Actuation Logic and Actuation Relays (LSELS and BOP ESFAS)	2	1	2	1,2,3	30

TABLE 3.3-3 (Continued)

ACTION STATEMENTS (Continued)

ACTION 27 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 12 hours, however, one channel may be bypassed for up to 4 hours for surveillance testing per Specification 4.3.2.1 provided the other channel is OPERABLE.

ACTION 28 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within 6 hours.

b. The minimum channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.2.1.

ACTION 29 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 6 hours or be in at least HOT STANDBY within the next 6 hours and in at least HOT SHUTDOWN within the following 6 hours; however, one channel may be bypassed for up to 4 hours for surveillance testing per Specification 4.3.2.1 provided the other channel is operable.

ACTION 30 - With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or declare the turbine-driven auxiliary feedwater pump inoperable and take the ACTION required by Specification 3.7.1.2.

With the number of OPERABLE channels two less than the Total Number of Channels, declare the turbine-driven auxiliary feedwater pump inoperable and take the ACTION required by Specification 3.7.1.2.

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATJRES ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNIT	TOTAL ALLOWANCE (TA)	Z	SENSOR ERROR (S)	TRIP SETPOINT	ALLOWABLE VALUE
6. Auxiliary Feedwater (Continued)					
2) Start Turbine-Driven Pumps	23.5	21.18	2.51	≥ 23.5% of narrow range instrument span	≥ 22.3% of narrow range instrument span
e. Safety Injection - Start Motor-Driven Pumps	See Item 1. above for all Safety Injection Trip Setpoints and Allowable Values.				
f. Loss-of-Offsite Power-Start Turbine-Driven Pump	N.A.	N.A.	N.A.	N.A.	N.A.
g. Trip of All Main Feedwater Pumps - Start Motor-Driven Pumps	N.A.	N.A.	N.A.	N.A.	N.A.
h. Auxiliary Feedwater Pump Suction Pressure-Low (Transfer to ESW)	N.A.	N.A.	N.A.	≥ 21.60 psia	≥ 20.53 psia
7. Automatic Switchover to Containment Sump					
a. Automatic Actuation Logic and Actuation Relays (SSPS)	N.A.	N.A.	N.A.	N.A.	N.A.
b. RWST Level-Low-Low	3.4	1.21	1.86	≥ 36% of instrument span	≥ 35.1% of instrument span
Coincident with Safety Injection	See Item 1. above for Safety Injection Trip Setpoints and Allowable Values.				
1) 4kV Bus Undervoltage - Loss of Voltage	See Item 8.a below for Trip Setpoints and Allowable Values.				
2) Automatic Actuation Logic and Actuation Relays (LSELS and BOPESFAS)	N.A.	N.A.	N.A.	N.A.	N.A.

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	ACTUATION LOGIC TEST	MASTER RELAY TEST	SLAVE RELAY TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
6. Auxiliary Feedwater (Continued)								
c. Automatic Actuation Logic and Actuation Relays (BOP ESFAS)	N.A.	N.A.	N.A.	N.A.	M(1)(2)	N.A.	N.A.	1, 2, 3
d. Steam Generator Water Level-Low-Low	S	R	Q	N.A.	N.A.	N.A.	N.A.	1, 2, 3
e. Safety Injection	See Item 1 above for all Safety Injection Surveillance Requirements							
~~f. Loss-Offsite Power~~ (See Insert A)	~~N.A.~~	~~R~~	~~N.A.~~	~~M~~	~~N.A.~~	~~N.A.~~	~~N.A.~~	~~1, 2, 3~~
g. Trip of All Main Feedwater Pumps	N.A.	N.A.	N.A	R	N.A.	N.A.	N.A.	1
h. Auxiliary Feedwater Pump Suction Pressure-Low	S	R	M	N.A.	N.A.	N.A.	N.A.	1, 2, 3
7. Automatic Switchover to Containment Sump								
a. Automatic Actuation Logic and Actuation Relays (SSPS)	N	N.A.	N.A.	N.A.	M(1)	M(1)	Q(3)	1, 2, 3, 4
b. RWST Level - Low-Low Coincident With Safety Injection	S	R	Q	N.A.	N.A.	N.A.	N.A.	1, 2, 3, 4
	See Item 1. above for all Safety Injection Surveillance Requirements.							
8. Loss of Power								
a. 4 kV Undervoltage - Loss of Voltage	N.A.	R(4)	N.A.	M(4)	N.A.	N.A.	N.A.	1, 2, 3, 4
b. 4 kV Undervoltage - Grid Degraded Voltage	N.A.	R(4)	N.A.	M(4)	N.A.	N.A.	N.A.	1, 2, 3, 4

CURRENT TECHNICAL SPECIFICATION (CTS) INSERTS

INSERT A:

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	ACTUATION LOGIC TEST	MASTER RELAY TEST	SLAVE RELAY TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
6.f Loss of Offsite Power - Start Turbine Driven Pump								
1) 4 kV Bus Undervoltage - Loss of Voltage	N.A.	R	N.A.	M	N.A.	N.A.	N.A.	1,2,3
2) Automatic Actuation Logic and Actuation Relays (LSELS and BOP ESFAS)	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	1,2,3

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	ACTUATION LOGIC TEST	MASTER RELAY TEST	SLAVE RELAY TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
9. Control Room Isolation								
a. Manual Initiation	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	All
b. Automatic Actuation Logic and Actuation Relays (SSPS)	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q(3)	1, 2, 3, 4
c. Automatic Actuation Logic and Actuation Relays (BOP ESFAS)	N.A.	N.A.	N.A.	N.A.	M(1)(2)	N.A.	N.A.	All
d. Phase "A" Isolation	See Item 3.a. above for all Phase "A" Isolation Surveillance Requirements.							
10. Solid-State Load Sequencer	N.A.	N.A.	N.A.	N.A.	M(1)(2)	N.A.	N.A.	1, 2, 3, 4
11. Engineered Safety Features Actuation System Interlocks								
a. Pressurizer Pressure, P-11	N.A.	R	Q	N.A.	N.A.	N.A.	N.A.	1, 2, 3
b. Reactor Trip, P-4	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3

TABLE NOTATIONS

(1) Each train shall be tested at least every 62 days on a STAGGERED TEST BASIS.

(2) Continuity check may be excluded from the ACTUATION LOGIC TEST.

(3) Except Relays K6C2, K620, K622, K624, K630, K740, and K741, which shall be tested at least once per 18 months during refueling and during each COLD SHUTDOWN exceeding 24 hours unless they have been tested within the previous 90 days.

(4) Testing of the time delay relays is performed as part of the CHANNEL CALIBRATION.

ATTACHMENT V

PROPOSED TECHNICAL SPECIFICATION CHANGES

IMPROVED TECHNICAL SPECIFICATIONS

ACTIONS (continued)

CONDITION		REQUIRED ACTION	COMPLETION TIME
M. One channel inoperable		----------Note---------- LCO 3.0.4 is not applicable ----------	
	M.1	Place channel in trip.	1 hour
	AND		
	M.2	Restore inoperable channel to OPERABLE status.	31 days or during performance of next COT, which occurs first.
N. One train inoperable		----------NOTE---------- One train may be bypassed for up to 2 hours for surveillance testing provided the other train is OPERABLE. ----------	
	N.1	Be in MODE 3.	6 hours
	AND		
	N.2	Be in MODE 4.	12 hours
O. One train inoperable.	O.1	Restore train to OPERABLE status.	48 hours
	OR		
	O.2	Enter applicable Condition(s) and Required Action(s) of LCO 3.7.5 for the turbine-driven auxiliary feedwater pump made inoperable.	48 hours
P. Two trains inoperable.	P.1	Enter applicable Condition(s) and Required Action(s) of LCO 3.7.5 for the turbine-driven auxiliary feedwater pump made inoperable.	Immediately

SURVEILLANCE REQUIREMENTS

----------NOTE----------
Refer to Table 3.3.2-1 to determine which SRs apply for each ESFAS Function.

	SURVEILLANCE	FREQUENCY
SR 3.3.2.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.2.2	Perform ACTUATION LOGIC TEST.	31 days on a STAGGERED TEST BASIS
SR 3.3.2.3	----------NOTE---------- The continuity check may be excluded. --- Perform ACTUATION LOGIC TEST.	31 days on a STAGGERED TEST BASIS
SR 3.3.2.4	Perform MASTER RELAY TEST.	31 days on a STAGGERED TEST BASIS
SR 3.3.2.5	Perform COT.	92 days
SR 3.3.2.6	Perform SLAVE RELAY TEST.	92 days
SR 3.3.2.7	Perform TADOT.	(18 months) ~~31 days~~

(continued)

Table 3.3.2-1 (page 7 of 9)
Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE[a]	
6. Auxiliary Feedwater (continued)						
d. Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.					
e. Loss of Offsite Power	1,2,3	2 trains	~~F~~ O,P	SR 3.3.2.7 ~~SR 3.3.2.9~~ SR 3.3.2.10	NA	NA

(continued)

(a) The Allowable Value defines the Limiting Safety System Setting. See the Bases for the Trip Setpoints.

BASES

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY

6. Auxiliary Feedwater (continued)

With the transmitters (d/p cells) located inside containment and thus possibly experiencing adverse environmental conditions (feed line break), the Trip Setpoint reflects the inclusion of both steady state and adverse environment instrument uncertainties. The Trip Setpoint for the Start Motor-Driven Pumps and the Start Turbine-Driven Pumps is ≥ 23.5% of narrow range instrumentation span.

d. Auxiliary Feedwater - Safety Injection

An SI signal starts the motor driven AFW pumps via LOCA sequencer. The AFW initiation functions are the same as the requirements for their SI function. Therefore, the requirements are not repeated in Table 3.3.2-1. Instead, Function 1, SI, is referenced for all initiating functions and requirements.

e. Auxiliary Feedwater - Loss of Offsite Power (LOP)

A loss of offsite power to the safeguard buses will be accompanied by a loss of reactor coolant pumping power and the subsequent need for some method of decay heat removal. The Loss of Offsite Power (LOP) is detected by a voltage drop on each safeguard bus. The LOP is sensed and processed by the circuitry for LOP DG start (Load Shedder Emergency Load Sequencer) and fed to the BOP ESFAS by the relay actuation. Loss of power to either safeguard bus will start the turbine driven AFW pump and automatically isolate the SG blowdown and sample lines to ensure that at least one SG contains enough water to serve as the heat sink for reactor decay heat and sensible heat removal following the reactor trip. In addition, once the diesel generators are started and up to speed, the motor driven AFW pumps will be sequentially loaded onto the diesel generator busses.

Functions 6.a, 6.b, 6.c, and 6.e must be OPERABLE in MODES 1, 2, and 3 to ensure that the SGs remain the heat sink for the reactor. SG Water Level - Low Low

(continued)

BASES

ACTIONS

E.1, E.2.1, and E.2.2 (continued)

To avoid the inadvertent actuation of containment spray and Phase B containment isolation, the inoperable channel should not be placed in the tripped condition. Instead it is bypassed. Restoring the channel to OPERABLE status, or placing the inoperable channel in the bypass condition within 6 hours, is sufficient to assure that the Function remains OPERABLE and minimizes the time that the Function may be in a partial trip condition (assuming the inoperable channel has failed high). The Completion Time is further justified based on the low probability of an event occurring during this interval. Failure to restore the inoperable channel to OPERABLE status, or place it in the bypassed condition within 6 hours, requires the unit be placed in MODE 3 within the following 6 hours and MODE 4 within the next 6 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems. In MODE 4, these Functions are no longer required OPERABLE.

The Required Actions are modified by a Note that allows one additional channel to be bypassed for up to 4 hours for surveillance testing. Placing a second channel in the bypass condition for up to 4 hours for testing purposes is acceptable based on the results of Reference 7.

E.1, E.2.1, and E.2.2

Condition F applies to:

- Manual Initiation of Steam Line (fast close) Isolation, and
- ~~Loss of Offsite Power; and~~
- P-4 Interlock.

For the Manual Initiation and the P-4 Interlock Functions, this action addresses the train orientation of the SSPS. ~~For the Loss~~

(continued)

BASES

ACTIONS

F.1, F.2.1, and F.2.2 (continued)

~~of Offsite Power Function, this action recognizes the lack of manual trip provision for a failed channel.~~ If a train or channel is inoperable, 48 hours is allowed to return it to OPERABLE status. The specified Completion Time is reasonable considering the nature of these Functions, the available redundancy, and the low probability of an event occurring during this interval. If the Function cannot be returned to OPERABLE status, the unit must be placed in MODE 3 within the next 6 hours and MODE 4 within the following 6 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power in an orderly manner and without challenging unit systems. In MODE 4, the unit does not have any analyzed transients or conditions that require the explicit use of the protection functions noted above.

G.1, G.2.1 and G.2.2

Condition G applies to the automatic actuation logic and actuation relays for the Steam Line Isolation and AFW actuation Functions.

The action addresses the train orientation of the SSPS and the master and slave relays for these functions. If one train is inoperable, 6 hours are allowed to restore the train to OPERABLE status. The Completion Time for restoring a train to OPERABLE status is reasonable considering that there is another train OPERABLE, and the low probability of an event occurring during this interval. If the train cannot be returned to OPERABLE status, the unit must be brought to MODE 3 within the next 6 hours and MODE 4 within the following 6 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems. Placing the unit in MODE 4 removes all requirements for OPERABILITY of the protection channels and actuation functions.

(continued)

BASES

ACTIONS (continued)

N.1 and N.2

Condition N applies to the Auxiliary Feedwater Balance of Plant ESFAS automatic actuation logic and actuation relays. With one train inoperable, the unit must be brought to MODE 3 within 6 hours and MODE 4 within the following 6 hours. The Required Actions are modified by a Note that allows one train to be bypassed for up to 2 hours for surveillance testing provided the other train is OPERABLE.

INSERT

SURVEILLANCE REQUIREMENTS

The SRs for each ESFAS Function are identified by the SRs column of Table 3.3.2-1.

A Note has been added to the SR Table to clarify that Table 3.3.2-1 determines which SRs apply to which ESFAS Functions.

Note that each channel of process protection supplies both trains of the ESFAS. When testing channel I, train A and train B must be examined. Similarly, train A and train B must be examined when testing channel II, channel III, and channel IV. The CHANNEL CALIBRATION and COTs are performed in a manner that is consistent with the assumptions used in analytically calculating the required channel accuracies.

SR 3.3.2.1

Performance of the CHANNEL CHECK once every 12 hours ensures that a gross failure of instrumentation has not occurred. A CHANNEL CHECK is normally a comparison of the parameter indicated on one channel to a similar parameter on other channels. It is based on the assumption that instrument channels monitoring the same parameter should read approximately the same value. Significant deviations between the two instrument channels could be an indication of excessive instrument drift in one of the channels or of something even more serious. A CHANNEL CHECK will detect gross channel failure; thus, it is key to verifying the instrumentation continues to operate properly between each CHANNEL CALIBRATION.

Agreement criteria are determined by the unit staff, based on a combination of the channel instrument uncertainties, including indication and reliability. If a channel is outside the

(continued)

INSERT

O.1 and O.2

Condition O applies to the Auxiliary Feedwater Loss of Offsite Power Function. If one train is inoperable, 48 hours is allowed to return it to OPERABLE status. The specified Completion Time is reasonable considering the fact that this Function is associated only with the turbine-driven AFW pump, the available redundancy provided by the motor-driven AFW pumps, and the low probability of an event occurring during this interval. If the Function cannot be returned to OPERABLE status, enter the applicable Condition(s) and Required Action(s) of LCO 3.7.5, "Auxiliary Feedwater (AFW) System." for the turbine-driven AFW pump made inoperable.

P.1

Condition P applies to the Auxiliary Feedwater Loss of Offsite Power Function. If two trains are inoperable, immediately enter the applicable Condition(s) and Required Action(s) of LCO 3.7.5, "Auxiliary Feedwater (AFW) System" for the turbine-driven AFW pump inoperable.

BASES

SURVEILLANCE REQUIREMENTS

SR 3.3.2.6 (continued)

feedwater pump trip solenoids since that circuitry serves no required safety function. The Frequency is adequate, based on industry operating experience, considering instrument reliability and operating history data.

SR 3.3.2.7

18 months

SR 3.3.2.7 is the performance of a TADOT every ~~31 days.~~ This test is a check of the Loss of Offsite Power function. The trip actuating devices tested within the scope of SR 3.3.2.7 are the ~~same LOP DG start circuits tested under SR 3.3.5.2.~~ LSELS output relays and BOP ESFAS separation groups logic associated with the turbine-driven AFW pump.

Relay setpoints require elaborate bench calibration and are verified during CHANNEL CALIBRATION. The Frequency is adequate. It is based on industry operating experience, ~~considering instrument reliability and operating history data.~~ and is consistent with the typical refueling cycle. The trip actuating devices tested have no associated setpoint.

SR 3.3.2.8

SR 3.3.2.8 is the performance of a TADOT. This test is a check of the Manual Actuation Functions (SSPS) and AFW pump start on trip of all MFW pumps BOP ESFAS. It is performed every 18 months. Each Manual Actuation Function is tested up to, and including, the master relay coils. In some instances, the test includes actuation of the end device (i.e., pump starts, valve cycles, etc.). The Frequency is adequate, based on industry operating experience and is consistent with the typical refueling cycle. The SR is modified by a Note that excludes verification of setpoints during the TADOT for manual initiation Functions. The manual initiation Functions have no associated setpoints.

SR 3.3.2.9

SR 3.3.2.9 is the performance of a CHANNEL CALIBRATION.

A CHANNEL CALIBRATION is performed every 18 months, or approximately at every refueling. CHANNEL CALIBRATION is a complete check of the instrument loop, including the sensor. The test verifies that the channel responds to measured parameter

(continued)

BASES

APPLICABLE SAFETY ANALYSES (continued)

The LOP DG start instrumentation channels satisfy Criterion 3 of 10 CFR 50.36 (c)(2)(ii).

LCO

The LCO for LOP DG start instrumentation requires that four channels per 4-kV NB system bus of both the loss of voltage and degraded voltage Functions shall be OPERABLE in MODES 1, 2, 3, and 4 when the LOP DG start instrumentation supports safety systems associated with the ESFAS. In MODES 5 and 6, the four channels must be OPERABLE whenever the associated DG is required to be OPERABLE to ensure that the automatic start of the DG is available when needed. Loss of the LOP DG Start Instrumentation Function could result in the delay of safety systems initiation when required. This could lead to unacceptable consequences during accidents. During the loss of offsite power the DG powers the motor driven auxiliary feedwater pumps. Failure of these pumps to start would leave the turbine driven pump, as well as an increased potential for a loss of decay heat removal through the secondary system.

which are automatically started after expiration of the appropriate time delays by the Load Shedder Emergency Load Sequencer.

started by the BOP ESFAS directly upon receipt of a loss of voltage signal from the Load Shedder Emergency Load Sequencer output relays.

APPLICABILITY

The LOP DG Start Instrumentation Functions are required in MODES 1, 2, 3, and 4 because ESF Functions are designed to provide protection in these MODES. Actuation in MODE 5 or 6 is required whenever the required DG must be OPERABLE so that it can perform its function on an LOP or degraded power to the vital bus.

ACTIONS

In the event a channel's Trip Setpoint is found nonconservative with respect to the Allowable Value, or the channel is found inoperable, then the function that channel provides must be declared inoperable and the LCO Condition entered for the particular protection function affected. Because the required channels are specified on a per bus basis, the Condition may be entered separately for each bus as appropriate.

A Note has been added in the ACTIONS to clarify the application of Completion Time rules. The Conditions of this Specification may be entered independently for each Function listed in the LCO. The Completion Time(s) of the inoperable channel(s) of a Function

(continued)

BASES

ACTIONS

C.1 (continued)

In these circumstances the Conditions specified in LCO 3.8.1, "AC Sources - Operating," or LCO 3.8.2, "AC Sources - Shutdown," for the DG made inoperable by failure of the LOP DG start instrumentation are required to be entered immediately. The actions of those LCOs provide for adequate compensatory actions to assure unit safety.

D.1

Condition D applies to each of the LOP DG start Functions when the Required Actions and associated Completion Times for Condition A and B are not met when the associated DG is required to be OPERABLE per LCO 3.8.2. In these circumstances the Conditions specified in LCO 3.8.2, "AC Sources - Shutdown" for the DG and and offsite circuit made inoperable by failure of the LOP DG start instrumentation are required to be entered immediately. The actions of that LCO are for adequate compensatory actions to assure unit safety.

SURVEILLANCE REQUIREMENTS

SR 3.3.5.1

Not Used.

SR 3.3.5.2

SR 3.3.5.2 is the performance of a TADOT. This test is performed every 31 days. The test checks trip devices that provide actuation signals directly, bypassing the analog process control equipment. For these tests, the relay Trip Setpoints are verified and adjusted as necessary. The Frequency is based on the known reliability of the relays and controls and the multichannel redundancy available, and has been shown to be acceptable through operating experience.

Testing of the time delay relays is performed as part of the CHANNEL CALIBRATION (SR 3.3.5.3)

SR 3.3.5.3

SR 3.3.5.3 is the performance of a CHANNEL CALIBRATION.

The setpoints, as well as the response to a loss of voltage and a degraded voltage test, shall include a single point

(continued)