

Attachment II

Marked Up Copy of R.E. Ginna Nuclear Power Plant
Technical Specifications

Included Pages:

3.3-27
B 3.3-95*
B 3.3-96*

- * These bases pages are being provided for information only to show the changes RG&E intends to make following NRC approval of the LAR. The bases are under RG&E control for all changes in accordance with Specification 5.5.13.

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Table 3.3.2-1 (page 3 of 3)
Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE HOOES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE	TRIP SETPOINT
5. Feedwater Isolation						
a. Automatic Actuation Logic and Actuation Relays	1,2 ^(c) ,3 ^(c)	2 trains	E,G	SR 3.3.2.7	NA	NA
b. SG Water Level -High	1,2 ^(c) ,3 ^(c)	3 per SG	F,G	SR 3.3.2.1 SR 3.3.2.2 SR 3.3.2.5	≤ 94%	≤ 85%
c. Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.					
6. Auxiliary Feedwater (AFW)						
a. Manual Initiation						
AFW	1,2,3	1 per pump	N	SR 3.3.2.4	NA	NA
Standby AFW	1,2,3	1 per pump	N	SR 3.3.2.4	NA	NA
b. Automatic Actuation Logic and Actuation Relays	1,2,3	2 trains	E,G	SR 3.3.2.7	NA	NA
c. SG Water Level -Low Low	1,2,3	3 per SG	F _{SG} ,G	SR 3.3.2.1 SR 3.3.2.2 SR 3.3.2.5	≥ 16%	≥ 17%
d. Safety Injection (Motor driven pumps only)	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.					
e. Undervoltage -Bus 11A and 11B (Turbine driven pump only)	1,2,3	2 per bus	D,G	SR 3.3.2.3 SR 3.3.2.5	≥ 2450 V with ≤ 3.6 sec time delay	≥ 2579 V with ≤ 3.6 sec time delay
f. Trip of Both Main Feedwater Pumps (Motor driven pumps only)	1,2	2 per HFW pump	B,C	SR 3.3.2.4	NA	NA

(c) Except when all Main Feedwater Regulating and associated bypass valves are closed and de-activated or isolated by a closed manual valve.

BASES

ACTIONS
(continued)

D.1

Condition D applies to the following ESFAS Functions:

- Manual Initiation of SI;
- Manual Initiation of Steam Line Isolation;
- ~~AFW-SG Water Level Low-Low; and~~
- AFW-Undervoltage-Bus 11A and 11B.

If a channel is inoperable, 48 hours is allowed to restore it to OPERABLE status. The specified Completion Time of 48 hours is reasonable considering that there are two automatic actuation trains and another manual initiation channel OPERABLE for each manual initiation, Function additional AFW actuation channels available besides the ~~SG Water Level Low-Low~~ ~~Low and~~ Undervoltage-Bus 11A and 11B AFW Initiation Functions, and the low probability of an event occurring during this interval.

E.1

Condition E applies to the automatic actuation logic and actuation relays for the following ESFAS Functions:

- Steam Line Isolation;
- Feedwater Isolation; and
- AFW.

Condition E addresses the train orientation of the protection system and the master and slave relays. If one train is inoperable, a Completion Time of 6 hours is allowed to restore the train to OPERABLE status. This Completion Time is reasonable considering that there is another train OPERABLE, and the low probability of an event occurring during this time interval. The Completion Time of 6 hours is consistent with Reference 7.

(continued)

BASES

ACTIONS
(continued)

F.1

Condition F applies to the following Functions:

- Steam Line Isolation - Containment Pressure - High High;
- Steam Line Isolation - High Steam Flow Coincident With Safety Injection and Coincident With T_{avg} - Low;
- Steam Line Isolation - High - High Steam Flow Coincident With Safety Injection; and
- Feedwater Isolation - SG Water Level - High;

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• AFW - SG Level - Low Low.

Condition F applies to Functions that typically operate on two-out-of-three logic. Therefore, failure of one channel places the Function in a two-out-of-two configuration. One channel must be tripped to place the Function in a one-out-of-two configuration that satisfies redundancy requirements.

If one channel is inoperable, a Completion Time of 6 hours is allowed to restore the channel to OPERABLE status or to place it in the tripped condition. Placing the channel in the tripped condition conservatively compensates for the inoperability, restores capability to accommodate a single failure, and allows operation to continue.

The Required Actions are modified by a Note that allows the inoperable channel to be bypassed for up to 4 hours for surveillance testing of other channels. This 4 hours applies to each of the remaining OPERABLE channels.

The Completion Time of 6 hours allowed to restore the channel to OPERABLE status or to place the inoperable channel in the tripped condition, and the 4 hours allowed for testing, are justified in Reference 7.

(continued)

Attachment III

Proposed Technical Specifications

Included Pages:

3.3-27

Table 3.3.2-1 (page 3 of 3)
Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE	TRIP SETPOINT
5. Feedwater Isolation						
a. Automatic Actuation Logic and Actuation Relays	1,2(c),3(c)	2 trains	E,G	SR 3.3.2.7	NA	NA
b. SG Water Level -High	1,2(c),3(c)	3 per SG	F,G	SR 3.3.2.1 SR 3.3.2.2 SR 3.3.2.5	≤ 94%	≤ 85%
c. Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.					
6. Auxiliary Feedwater (AFW)						
a. Manual Initiation						
AFW	1,2,3	1 per pump	N	SR 3.3.2.4	NA	NA
Standby AFW	1,2,3	1 per pump	N	SR 3.3.2.4	NA	NA
b. Automatic Actuation Logic and Actuation Relays	1,2,3	2 trains	E,G	SR 3.3.2.7	NA	NA
c. SG Water Level -Low Low	1,2,3	3 per SG	F,G	SR 3.3.2.1 SR 3.3.2.2 SR 3.3.2.5	≥ 16%	≥ 17%
d. Safety Injection (Motor driven pumps only)	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.					
e. Undervoltage -Bus 11A and 11B (Turbine driven pump only)	1,2,3	2 per bus	D,G	SR 3.3.2.3 SR 3.3.2.5	≥ 2450 V with ≤ 3.6 sec time delay	≥ 2579 V with ≤ 3.6 sec time delay
f. Trip of Both Main Feedwater Pumps (Motor driven pumps only)	1,2	2 per MFW pump	B,C	SR 3.3.2.4	NA	NA

(c) Except when all Main Feedwater Regulating and associated bypass valves are closed and de-activated or isolated by a closed manual valve.

Attachment IV

NUREG-1431

Included pages:

3.3-24

3.3-37

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One train inoperable.	C.1 -----NOTE----- One train may be bypassed for up to [4] hours for surveillance testing provided the other train is OPERABLE. ----- Restore train to OPERABLE status.	6 hours
	<u>OR</u>	
	C.2.1 Be in MODE 3.	12 hours
	<u>AND</u> C.2.2 Be in MODE 5.	42 hours
D. One channel inoperable. <i>Same as Gunna Required Action F.1</i>	D.1 -----NOTE----- The inoperable channel may be bypassed for up to [4] hours for surveillance testing of other channels. ----- Place channel in trip.	6 hours
	<u>OR</u>	
	D.2.1 Be in MODE 3.	12 hours
	<u>AND</u> D.2.2 Be in MODE 4.	18 hours

(continued)

Table 3.3.2-1 (page 6 of 8)
Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE	TRIP SETPOINT(a)
5. Turbine Trip and Feedwater Isolation						
a. Automatic Actuation Logic and Actuation Relays	1,2(j), [3](j)	2 trains	H[G]	SR 3.3.2.2 SR 3.3.2.4 SR 3.3.2.6	NA	NA
b. SG Water Level - High High (P-14)	1,2(j), [3](j)	[3] per SG	I[D]	SR 3.3.2.1 SR 3.3.2.5 SR 3.3.2.9 SR 3.3.2.10	≤ [84.2]%	≤ [82.4]%
c. Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.					
6. Auxiliary Feedwater						
a. Automatic Actuation Logic and Actuation Relays (Solid State Protection System)	1,2,3	2 trains	G	SR 3.3.2.2 SR 3.3.2.4 SR 3.3.2.6	NA	NA
b. Automatic Actuation Logic and Actuation Relays (Balance of Plant ESFAS)	1,2,3	2 trains	G	SR 3.3.2.3	NA	NA
c. SG Water Level - Low Low	1,2,3	[3] per SG	D	SR 3.3.2.1 SR 3.3.2.5 SR 3.3.2.9 SR 3.3.2.10	≥ [30.4]%	≥ [32.2]%

(continued)

- (a) Reviewer's Note: Unit specific implementations may contain only Allowable Value depending on Setpoint Study methodology used by the unit.
- (j) Except when all MFIVs, MFRVs, [and associated bypass valves] are closed and [de-activated] [or isolated by a closed manual valve].

