

ATTACHMENT 1

REVISED PROPOSED MCGUIRE UNIT 1 AND 2 TECHNICAL SPECIFICATION CHANGES

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TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
3. Containment Isolation (continued):					
b. Phase "B" Isolation					
1) Manual Initiation	2	1	2	1, 2, 3, 4	18
2) Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2, 3, 4	14
3) Containment Pressure--High-High	4	2	3	1, 2, 3	16
c. Purge and Exhaust Isolation					
1) Manual Initiation	2	1	2	1, 2, 3, 4	17
2) Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2, 3, 4	17
3) Safety Injection					See Item 1. above for all Safety Injection initiating functions and requirements
2A) AUTOMATIC ACTUATION LOGIC AND ACTUATION RELAYS	2	1	1	5, 6, 7, 8	17A***

McGUIRE - UNITS 1 and 2

3/4 3-18

ACTUATION NO. (UNIT 1)
INSTRUMENT NO. (UNIT 2)

TABLE 3.3-3 (Continued)

TABLE NOTATION

Trip function may be blocked in this MODE below the P-11 (Pressurizer Pressure Interlock) Setpoint.

Trip function automatically blocked above P-11 and may be blocked below P-11 when Safety Injection on low steam pressure is not blocked.

"NO MODE" OPERATION

** These values left blank pending NRC approval of three loop operation.

*** THE PROVISIONS OF SPECIFICATION 3.0.3 ARE NOT APPLICABLE.

NOTE 1: TURBINE DRIVEN AUXILIARY FEEDWATER PUMP WILL NOT START ON A BLACKOUT SIGNAL COINCIDENT WITH A SAFETY INJECTION SIGNAL.

ACTION STATEMENTS

ACTION 14 With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1, provided the other channel is OPERABLE.

ACTION 15 With the number of OPERABLE channels one less than the Total Number of Channels, operation may proceed until performance of the next required OPERATIONAL TEST provided the inoperable channel is placed in the tripped condition within 1 hour.

ACTION 16 With the number of OPERABLE channels one less than the Total Number of Channels, operation may proceed provided the inoperable channel is placed in the bypassed condition and the Minimum Channels OPERABLE requirement is met. One additional channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1.

ACTION 17 - With less than the Minimum Channels OPERABLE requirement, operation may continue provided the containment purge supply and exhaust valves are maintained closed.

ACTION 17A - WITH THE NUMBER OF CHANNELS OPERABLE LESS THAN REQUIRED BY THE MINIMUM CHANNELS OPERABLE REQUIREMENT, IMMEDIATELY CLOSE ALL DIRECT (UNFILTERED) PATHS TO THE OUTSIDE ENVIRONMENT AND MONITOR EME-36 TO ENSURE IT IS NOT IN ALARM. SUSPEND PURGING OF RADIOACTIVE EFFLUENTS VIA THIS PATHWAY AS SOON AS ALL DIRECT PATHS ARE CLOSED.

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
3. Containment Isolation								
a. Phase "A" Isolation								
1) Manual Initiation	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3, 4
2) Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2, 3, 4
3) Safety Injection	See Item 1. above for all Safety Injection Surveillance Requirements.							
b. Phase "B" Isolation								
1) Manual Initiation	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3, 4
2) Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2, 3, 4
3) Containment Pressure-High-High	S	R	M	N.A.	N.A.	N.A.	N.A.	1, 2, 3
c. Purge and Exhaust Isolation								
1) Manual Initiation	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3, 4
2) Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2, 3, 4 *
3) Safety Injection	See Item 1. above for all Safety Injection Surveillance Requirements.							

TABLE 4.3-2 (Continued)

TABLE NOTATION

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

*AT ALL TIMES

INSTRUMENTATION

BASES

3/4.3.1 and 3/4.3.2 REACTOR TRIP AND ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (Continued)

following actions may be initiated by the Engineered Safety Features Actuation System to mitigate the consequences of a steam line break or loss-of-coolant accident: (1) Safety Injection pumps start and automatic valves position, (2) Reactor trip, (3) feedwater isolation, (4) startup of the emergency diesel generator, (5) containment spray pumps start and automatic valves position, (6) containment isolation, (7) steam line isolation, (8) Turbine trip, (9) auxiliary feedwater pumps start and automatic valves position, and (10) nuclear service water pumps start and automatic valves position.

Technical Specifications for the Reactor Trip Breakers and the Reactor Trip Bypass Breakers are based upon NRC Generic Letter 85-09 "Technical Specifications for Generic Letter 83-28, Item 4.3," dated May 23, 1985.

ALTHOUGH NOT REQUIRED BY ESFAS CONSIDERATIONS, SPECIFICATION 3/4.3.2 IMPOSES REQUIREMENTS FOR THE CONTAINMENT PURGE AND EXHAUST ISOLATION AUTOMATIC ACTUATION LOGIC AND ACTUATION RELAYS BELOW MORE 4 TO ENSURE THE OPERABILITY OF THE AUTOMATIC ISOLATION CAPABILITY OF THE CONTAINMENT PURGE SYSTEM FROM EME-39 BY DUPLICATING REQUIREMENTS OF SPECIFICATION 3/4.3.3.9.

ATTACHMENT 2
REVISED JUSTIFICATION AND SAFETY ANALYSIS PORTION

The proposed changes to Technical Specification 3/4.3.2 Table 3.3-3 Functional Unit 3.c.2 and Table 4.3-2 Functional Unit 3.c.2 seek to add requirements to these Engineered Safety Features Actuation System (ESFAS) Instrumentation Tables. These proposed changes are the result of an event at McGuire in which both trains of the Solid State Protection System (SSPS) were inoperable for testing which disabled the automatic isolation capability of the containment Purge Ventilation (VP) system from radiation monitor EMF-39 (Ref. Licensee Event Report 369/86-10).

Technical Specifications 3/4.3.2 and 3/4.3.3.9 have different requirements imposed on the automatic isolation capability of the VP System. T.S. 3/4.3.2 Engineered Safety Features Actuation System Instrumentation (Functional Unit 3.c.2 - containment purge and exhaust isolation automatic actuation logic and actuation relays) requires the automatic isolation actuation capability of the containment purge and exhaust valves in Modes 1,2,3, and 4, but not for Modes 5,6, and "No Mode" (no fuel in the reactor) status. A minimum of two channels are required to be operable in Modes 1-4, or the containment purge supply and exhaust valves are to be maintained closed in accordance with Table 3.3-3 Action 17. The solid state protection system supplies reactor and component trip signals and initiates Engineered Safety Features (two redundant trains, identical in function, provide equipment and personnel protection during normal operating and emergency conditions). Both trains of SSPS are allowed to be out of service by T.S. 3/4.3.2. T.S. 3/4.3.3.9 Radioactive Gaseous Effluent Monitoring Instrumentation (Instrument No.5 - containment purge system low range noble gas activity monitor EMF-39) provides alarm and automatic termination of release. A minimum of one channel is required to be operable "at all times" in order to provide for the isolation of the VP System as appropriate (if EMF-39 detects high radiation it will send a signal to the SSPS to energize a relay (K615) which in turn isolates the VP System), or purging or venting of radioactive effluents via this pathway is to be immediately suspended in accordance with Table 3.3-13 Action 38 [Note that a proposed Technical Specification change currently under NRC review would allow credit to be taken for radiation monitor EMF-36 (unit vent monitor) if EMF-39 is inoperable below Mode 4 (ref. DPC to NRC letter dated April 1, 1988)].

Since EMF-39 requires one train of SSPS to be operable in order to energize relay K615, the proposed T.S.3/4.3.2 changes would require the operability of the containment purge and exhaust isolation automatic actuation logic and actuation relays in Modes 5,6, and in "No Mode" status (note that while the overall SSPS may be removed from service below Mode 4, temporary wiring may be installed to maintain power to relay K615). Although EMF-39 is not an ESFAS device and does not serve a safety function (no credit is taken for it in the mitigation of an accident as assumed in the safety analysis), the changes would duplicate relevant T.S. 3/4.3.3.9 requirements to clarify that at least one channel of the automatic isolation capability of the containment purge system must remain operable below Mode 4 (in order to maintain T.S. 3/4.3.3.9 requirements which require one channel to be operable "at all times"), with a minimum of two channels required in Modes 1-4 (pursuant to the current T.S. 3/4.3.2 requirements). The T.S. 3/4.3.2 action requirement (i.e. action 17) applicable in Modes 1-4 (i.e. for Table 3.3-3 Functional Unit 3.c.2) remain as currently required by T.S. 3/4.3.2 (which is more restrictive than

currently required by T.S. 3/4.3.3.9 for Modes 1-4), but the added T.S. 3/4.3.2 action requirement (i.e. action 17A) applicable below Mode 4 (i.e. for added Table 3.3-3 Functional Unit 3.c.2A) is identical to the corresponding T.S. 3/4.3.3.9 action (i.e. Table 3.3-13 Action 38) as proposed to be revised in the above referenced April 1, 1988 submittal. A full discussion and justification of the proposed Action 38 versus the existing requirements are contained in the April 1, 1988 submittal. [Should the proposed changes in the April 1, 1988 submittal be denied, this proposal should, at that time, be considered modified to specify Action 17 for proposed Table 3.3-3 functional Unit 3.c.2A instead of Action 17A]. The three asterisks on Action 17A are to denote that the provisions of Specification 3.0.3 do not apply for this item below Mode 4, as is now specified in T.S. 3/4.3.3.9. Appropriate revisions to Table 3.3.3's table notation and action statements are made to reflect the added requirements (i.e. Table notation definitions for "###" and "***", and statement of Action 17A). The surveillance requirements as specified in T.S. 3/4.3.2 Table 4.3-2 are also changed. Presently, the Table, under "Modes for which surveillance is required", specifies Modes 1,2,3, and 4; the proposal would expand the requirements to "at all times". This will ensure operability of the components below Mode 4. The Bases section for Specification 3/4.3.2 is also revised to reflect these proposed changes.

The proposed changes include no new substantive proposals or requirements. The changes to Specification 3/4.3.2 Functional Unit 3.c.2 ensure the operability of the automatic isolation capability of the containment purge system by duplicating (as a minimum) the requirements of Specification 3/4.3.3.9 Instrument No. 5. The requirements of the two Specifications below Mode 4 would be identical, with the ESFAS Specification more restrictive in Modes 1-4 (as it now exists). The duplication will alert the operators to the fact that one channel of the automatic actuation logic and actuation relays for containment purge isolation must remain operable at all times, even when there is no fuel in containment.