ATTACHMENT NO. 3 TO PLA-4648

TECHNICAL SPECIFICATIONS MARK-UPS

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3/4.3 INSTRUMENTATION

3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.1 As a minimum, the reactor protection system instrumentation channels shown in Table 3.3.1-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.1-1.

ACTION:

a. With one or more required channels inoperable in one trip system, place the inoperable channel(s) or the associated trip system in the tripped condition within 12 hours.

b. With one or more required channels inoperable in both trip systems, place the inoperable channel(s) in one trip system or one trip system in the tripped condition within 6 hours.*

c. With one or more RPS Functions with RPS trip capability not maintained, restore RPS trip capability within one hour.

d. If ACTION a or b or c is not met, take the ACTION required by Table 3.3.1-1 for the RPS Function.

The provisions of Specification 3.0.4 are not applicable for entry into OPERATIONAL CONDITION 2 or 3 from OPERATIONAL CONDITION 1 for the IRMs or the Neutron Flux - Upscale, Setdown function for the APRMs.

SURVEILLANCE REQUIREMENTS

4.3.1.1 Each reactor protection system instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.1.1-1.

4.3.1.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.1.3 The REACTOR PROTECTION SYSTEM RESPONSE TIME ~~of each reactor trip functional unit~~ shall be demonstrated to be within its limit at least once per 18 months**. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific reactor trip system.

DELETE

DELETE

4.3.1.4 The provisions of Specification 4.0.4 are not applicable for entry into Operational Condition 2 or 3 from Operational Condition 1 for the IRMs or the Neutron Flux - Upscale, Setdown function of the APRMs.

(for functional units 2b, 2c, 3, 4, 5, 9 and 10 in Table 3.3.1-1.#

* If more channels are inoperable in one trip system than in the other, place the trip system with more inoperable channels in the tripped condition, except when this would cause a scram to occur.

** The neutron detectors are exempt from response time testing.

Response time testing is not required for functional unit 4. of sensors

INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

4.3.2.1 Each isolation actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.2.1-1.

4.3.2.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.2.3 The ISOLATION SYSTEM RESPONSE TIME ~~of each isolation trip function~~ shall be demonstrated to be within its limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months, where N is the total number of redundant channels in a specific isolation trip system.

DELETE

for trip functions 1e, 3a, 3b, 3c, 3d and 4a in Table 3.3.2-1.#

Radiation detectors are exempt from response time testing for functions 1e and 3b. Response time testing of sensors is not required for functions 3a, 3c and 3d. Response time testing of isolating relays for function 4a is not required. Response time testing of functions 1e and 3b (≤10 second requirement) is not required. The sensor response time testing requirement for functions 1e and 3b (≤10 second requirement) is met by testing the sensor to the ≤1 second requirement for function 3b.

*** Neutron detectors are exempt from response time testing.

INSTRUMENTATION

3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3 The emergency core cooling system (ECCS) actuation instrumentation channels shown in Table 3.3.3-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.3-2.

APPLICABILITY: As shown in Table 3.3.3-1.

ACTION:

a. With an ECCS actuation instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.3-2, declare the channel inoperable until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value.

b. With one or more ECCS actuation instrumentation channels inoperable, take the ACTION required by Table 3.3.3-1.

SURVEILLANCE REQUIREMENTS

4.3.3.1 Each ECCS actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.3.1-1.

4.3.3.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

DELETE

4.3.3.3 The ECCS RESPONSE TIME ~~of each ECCS trip function~~ shall be demonstrated to be within the limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific ECCS trip system.

for trip functions 1a, 1b, 1c, 2a, 2b, 2.c(1), 2.c(2), 3a and 3b in Table 3.3.3-1.#

Response time testing of sensors and relays is not required for these functions.

3/4.3 INSTRUMENTATION

3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.1 As a minimum, the reactor protection system instrumentation channels shown in Table 3.3.1-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.1-1.

ACTION:

a. With one or more required channels inoperable in one trip system, place the inoperable channel(s) or the associated trip system in the tripped condition within 12 hours.

b. With one or more required channels inoperable in both trip systems, place the inoperable channel(s) in one trip system or one trip system in the tripped condition within 6 hours.*

c. With one or more RPS Functions with RPS trip capability not maintained, restore RPS trip capability within one hour.

d. If ACTION a or b or c is not met, take the ACTION required by Table 3.3.1-1 for the RPS Function.

The provisions of Specification 3.0.4 are not applicable for entry into OPERATIONAL CONDITION 2 or 3 from OPERATIONAL CONDITION 1 for the IRMs or the Neutron Flux - Upscale, Setdown function for the APRMs.

SURVEILLANCE REQUIREMENTS

4.3.1.1 Each reactor protection system instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.1.1-1.

4.3.1.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.1.3 The REACTOR PROTECTION SYSTEM RESPONSE TIME ~~of each reactor trip functional unit shall be~~ demonstrated to be within its limit at least once per 18 months.** Each ~~test shall~~ include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant ~~channels in~~ a specific reactor trip system.

4.3.1.4 The provisions of Specification 4.0.4 are not applicable for entry into Operational Condition 2 or 3 from Operational Condition 1 for the IRMs or the Neutron Flux - Upscale, Setdown function of the APRMs.

DELET

DELETE

for functional units 2b, 2c, 3, 4, 5, 9 and 10 in Table 3.3.1-1 #

* If more channels are inoperable in one trip system than in the other, place the trip system with more inoperable channels in the tripped condition, except when this would cause a scram to occur.

** Neutron detectors are exempt from response time testing.

Response time testing is not required for functional unit 4.

of sensors

INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

4.3.2.1 Each isolation actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.2.1-1.

4.3.2.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.2.3 The ISOLATION SYSTEM RESPONSE TIME ~~of each isolation trip function~~ shall be demonstrated to be within its limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months, where N is the total number of redundant channels in a specific isolation trip system.

DELETE

for trip functions 1e, 3a, 3b, 3c, 3d and 4a in Table 3.3.2-1.#

Radiation detectors are exempt from response time testing for functions 1e and 3b. Response time testing of sensors is not required for functions 3a, 3c and 3d. Response time testing of isolating relays for function 4a is not required. Response time testing of functions 1e and 3b (≤ 10 second requirement) is not required. The sensor response time testing requirement for functions 1e and 3b (≤ 10 second requirement) is met by testing the sensor to the ≤ 1 second requirement for function 3b.

*** Neutron detectors are exempt from response time testing.

INSTRUMENTATION

3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3 The emergency core cooling system (ECCS) actuation instrumentation channels shown in Table 3.3.3-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.3-2.

APPLICABILITY: As shown in Table 3.3.3-1.

ACTION:

a. With an ECCS actuation instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.3-2, declare the channel inoperable until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value.

b. With one or more ECCS actuation instrumentation channels inoperable, take the ACTION required by Table 3.3.3-1.

SURVEILLANCE REQUIREMENTS

4.3.3.1 Each ECCS actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.3.1-1.

4.3.3.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.3.3 The ECCS RESPONSE TIME ~~of each ECCS trip function~~ shall be demonstrated to be within the limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific ECCS trip system.

DELETE

for trip functions 1a, 1b, 1c, 2a, 2b, 2.c(1), 2.c(2), 3a and 3b in Table 3.3.3-1. #

Response time testing of sensors and relays is not required for these functions.