



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NIAGARA MOHAWK POWER CORPORATION
DOCKET NO. 50-410
NINE MILE POINT NUCLEAR STATION, UNIT 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 61
License No. NPF-69

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated October 28, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter 1;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-69 is hereby amended to read as follows:

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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 61 are hereby incorporated into this license. Niagara Mohawk Power Corporation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Donald J. Brinkman
for Michael J. Case, Acting Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 20, 1995



ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 61 TO FACILITY OPERATING LICENSE NO. NPF-69

DOCKET NO. 50-410

Revise Appendix A as follows:

Remove Pages

1-2
-
3/4 3-13
3/4 3-15
3/4 3-26
3/4 3-28
3/4 9-5
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Insert Pages

1-2
1-2a (added page)
3/4 3-13
3/4 3-15
3/4 3-26
3/4 3-28
3/4 9-5
B3/4 9-1



DEFINITIONS

CHANNEL FUNCTIONAL TEST

1.6 (Continued)

The CHANNEL FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total channel steps so that the entire channel is tested.

CORE ALTERATION

1.7 CORE ALTERATION shall be the movement of any fuel, or reactivity control components within the reactor vessel with the vessel head removed and fuel in the vessel. The following exceptions are not considered to be CORE ALTERATIONS:

- a. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special movable detectors (including undervessel replacement); and
- b. Control rod movement provided there are no fuel assemblies in the associated core cell.

Suspension of CORE ALTERATIONS shall not preclude completion of movement to a safe position.

CORE MAXIMUM FRACTION OF LIMITING POWER DENSITY

1.8 The CORE MAXIMUM FRACTION OF LIMITING POWER DENSITY (CMFLPD) shall be the highest value of the FLPD which exists in the core.

CRITICAL POWER RATIO

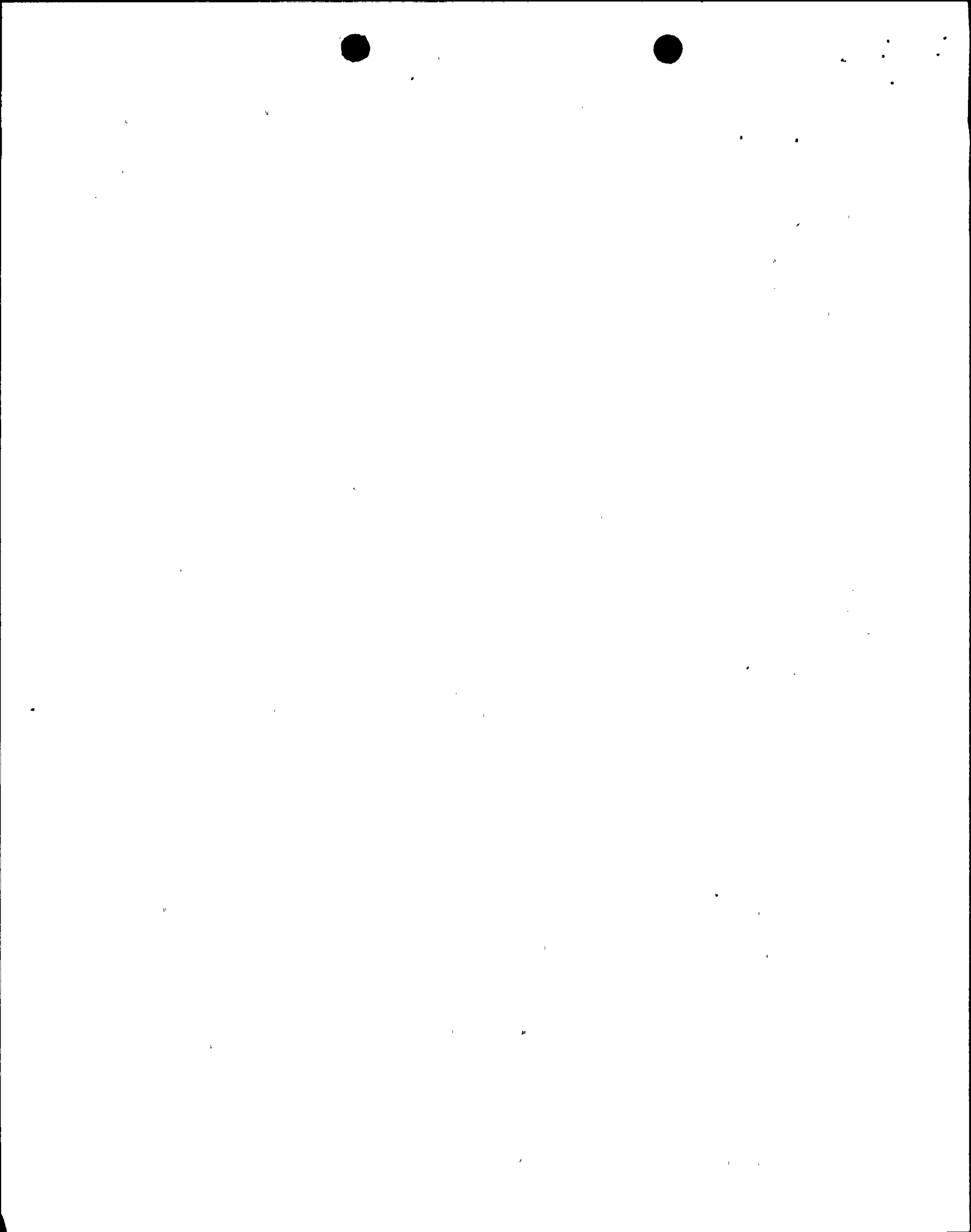
1.9 The CRITICAL POWER RATIO (CPR) shall be the ratio of that power in the assembly which is calculated by application of an approved critical power correlation to cause some point in the assembly to experience boiling transition, divided by the actual fuel assembly operating power.

DOSE EQUIVALENT I-131

1.10 DOSE EQUIVALENT I-131 shall be that concentration of I-131, expressed in microcuries per gram, which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors for Power and Test Reactor Sites."

\bar{E} - AVERAGE DISINTEGRATION ENERGY

1.11 \bar{E} shall be the average, weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling, of the sum of the average beta and gamma energies per disintegration, expressed in MeV, for isotopes, with half-lives greater than 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.



DEFINITIONS

EMERGENCY CORE COOLING SYSTEM RESPONSE TIME

1.12 The EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ECCS actuation setpoint at the channel sensor until the ECCS equipment is capable of performing its safety function, i.e., the valves travel to their required positions, pump



TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>VALVE GROUPS OPERATED BY SIGNAL (a)</u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (b)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
1. <u>Primary Containment Isolation Signals</u> (Continued)				
h. SGTS Exhaust - High Radiation	9	1	1, 2, 3	27
i. RWCU System				
1) ΔFlow - High	6, 7	1	1, 2, 3	22
2) ΔFlow - High, Timer	6, 7	1	1, 2, 3	22
3) Standby Liquid Control, SLCS, Initiation	6(f), 7(f)	1	1, 2	22
j. RWCU Equipment Area				
1) Pump Room A Temperature - High	6, 7	1	1, 2, 3	22
2) Pump Room B Temperature - High	6, 7	1	1, 2, 3	22
3) HX Room Temperature - High	6, 7	1	1, 2, 3	22
k. Reactor Building Pipe Chase				
1) Azimuth 180° (Upper), Temperature - High	5, 6, 7, 10	1	1, 2, 3	22
2) Azimuth 180° (Lower), Temperature - High	5, 6, 7, 10	2	1, 2, 3	22
3) Azimuth 40°, Temperature - High	5, 6, 7, 10	1	1, 2, 3	22
l. Reactor Building Temperature - High	5, 10	5	1, 2, 3	22
m. Manual Isolation Pushbutton [NSSSS]	1	2	1, 2, 3	25
	2, 4, 5	2	1, 2, 3	26
	3, 6, 7	1	1, 2, 3	26
	8	2	1, 2, 3	25, 27
	9	2	1, 2, 3	27

NINE MILE POINT - UNIT 2

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ISOLATION ACTUATION INSTRUMENTATION

TABLE NOTATIONS

- * During CORE ALTERATIONS and operations with a potential for draining the reactor vessel. This applies to functions described in notes (c) and (d) that isolate secondary containment and automatically start the SGTS.
- ** When any turbine stop valve is greater than 90% open and/or when the key-locked condenser low vacuum bypass switch is open (in Normal position).
- † Deleted.
- †† When handling irradiated fuel in the reactor building and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.
- (a) Refer to Table 3.3.2-4 for valve groups, associated isolation signals and key to isolation signals.
- (b) A channel may be placed in an inoperable status for up to 6 hours for required surveillance without placing the Trip System in the tripped condition provided at least one other OPERABLE channel in the same Trip System is monitoring that parameter.
- (c) Also actuates the standby gas treatment system.
- (d) Also actuates reactor building ventilation isolation dampers per Table 3.6.5.2-1.
- (e) Also trips and isolates the air removal pumps.
- (f) Initiation of SLCS pump 2SLS*P1B closes 2WCS*MOV102 and manual initiation of SLCS pump 2SLS*P1A closes 2WCS*MOV112.
- (g) For this signal one Trip System has 2 channels which close valves 2ICS*MOV 128 and 2ICS*MOV 170, while the other Trip System has 2 channels which close 2ICS*MOV 121.
- (h) Manual initiation only isolates 2ICS*MOV121 and only following manual or automatic initiation of the RCIC system.
- (i) Only used in conjunction with low RCIC steam supply pressure and high drywell pressure to isolate 2ICS*MOV148 and 2ICS*MOV164.
- (j) Signal from LPCS/RHR initiation circuitry.



TABLE 4.3.2.1-1 (Continued)

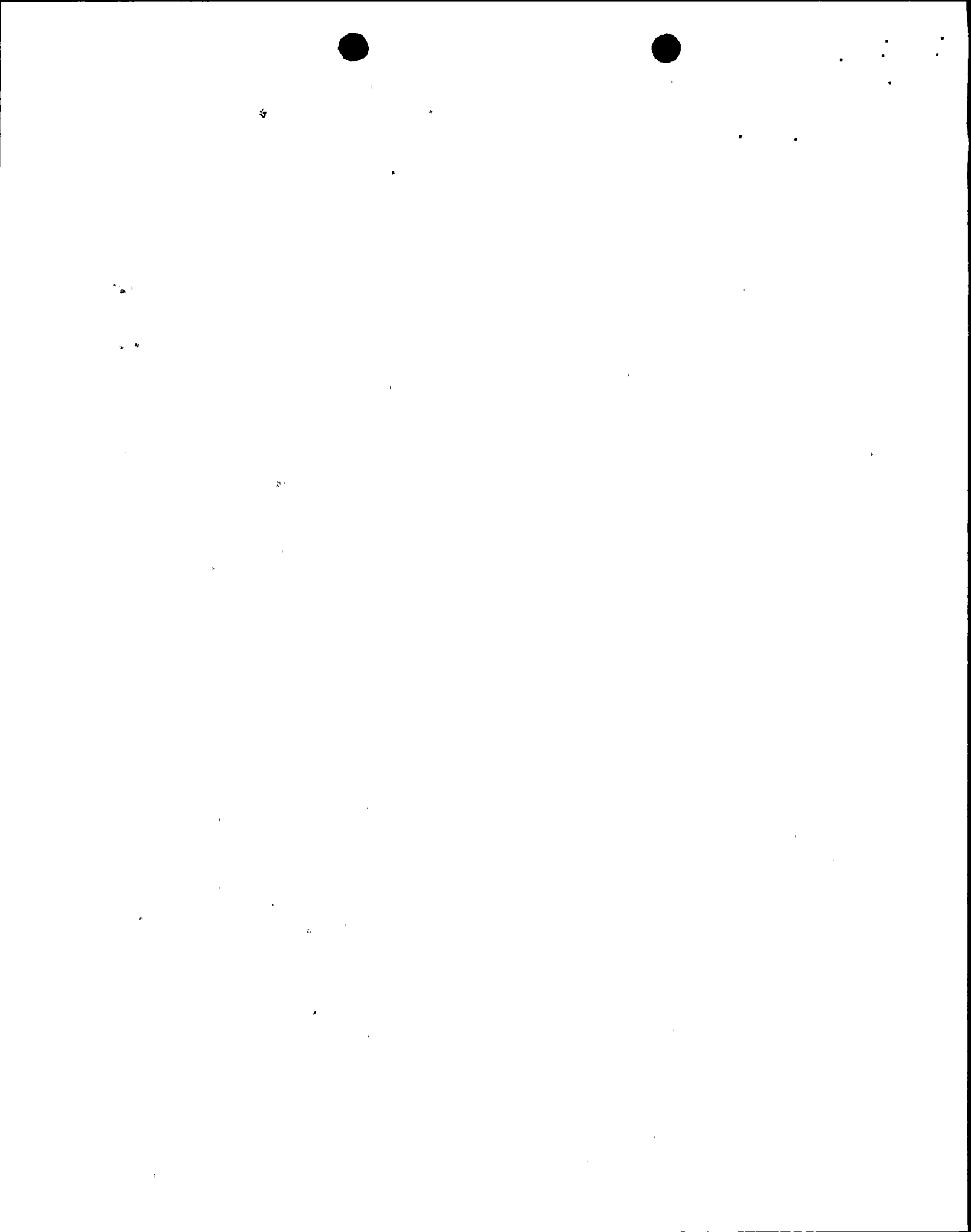
ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTION TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATION CONDITIONS FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. <u>Primary Containment Isolation Signals</u> (Continued)				
h. SGTS Exhaust - High Radiation	NA	Q	R	1, 2, 3
i. RWCU System				
1) ΔFlow - High	S	Q	R	1, 2, 3
2) ΔFlow - High, Timer	NA	Q	R	1, 2, 3
3) Standby Liquid Control, SLCS, Initiation	NA	R	NA	1, 2
j. RWCU Equipment Area				
1) Pump Room A Temperature - High	S	Q	R(b)	1, 2, 3
2) Pump Room B Temperature - High	S	Q	R(b)	1, 2, 3
3) HX Room Temperature - High	S	Q	R(b)	1, 2, 3
k. Reactor Building Pipe Chase				
1) Azimuth 180° (Upper), Temperature - High	S	Q	R(b)	1, 2, 3
2) Azimuth 180° (Lower), Temperature - High	S	Q	R(b)	1, 2, 3
3) Azimuth 40°, Temperature - High	S	Q	R(b)	1, 2, 3
l. Reactor Building Temperature - High	S	Q	R(b)	1, 2, 3
m. Manual Isolation Pushbutton [NSSSS]	NA	Q(c)	NA	1, 2, 3

NINE MILE POINT - UNIT 2

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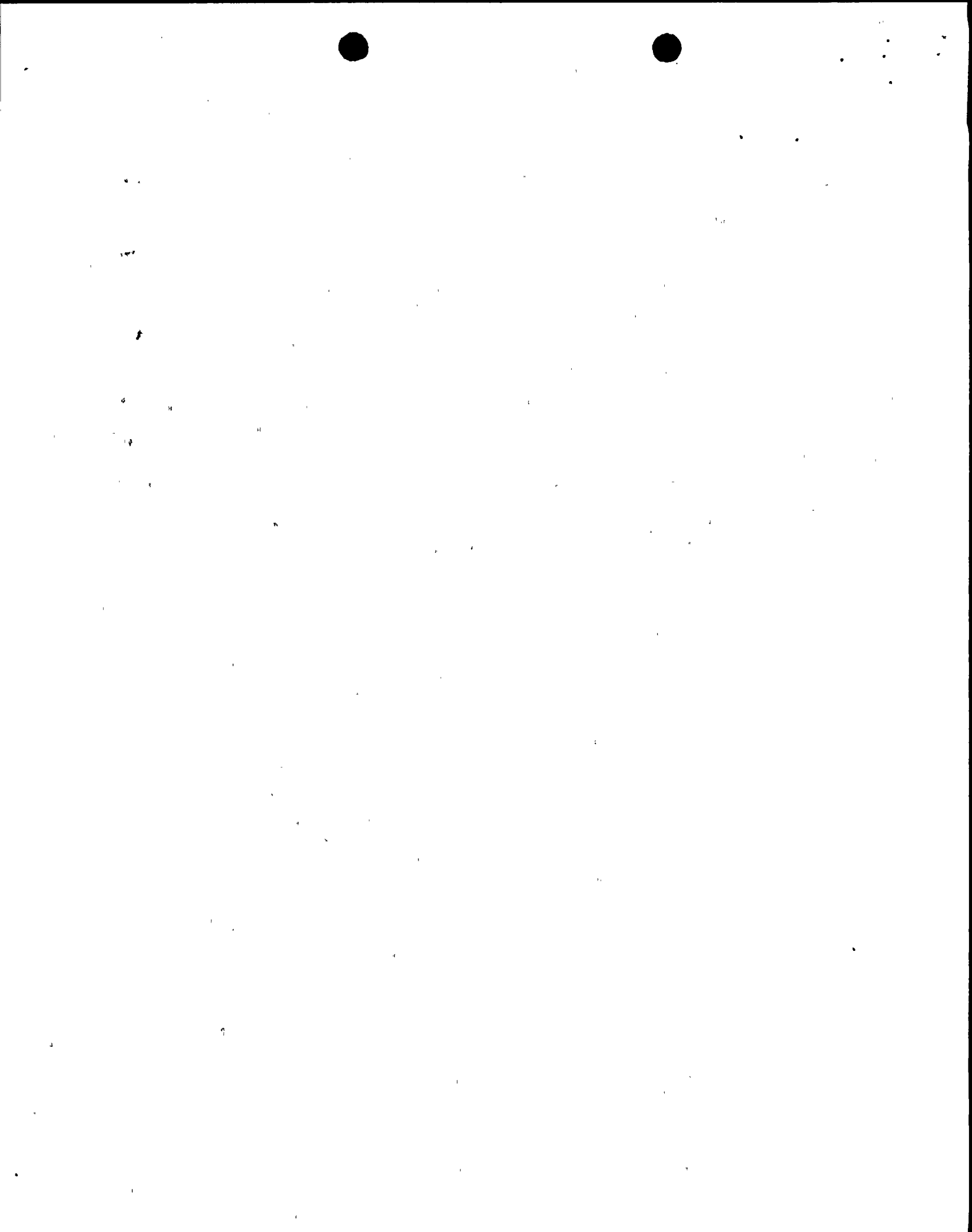
AMENDMENT NO. 41, 61



ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

TABLE NOTATIONS

- * During CORE ALTERATIONS and operations with a potential for draining the reactor vessel. This only applies to secondary containment isolation and automatic start of SGTS.
 - ** When any turbine stop valve is greater than 90% open and/or when the key-locked condenser low vacuum bypass switch is open (in Normal position).
 - † When handling irradiated fuel in the reactor building and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.
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- (a) Perform the calibration procedure for the trip unit setpoint at least once per 92 days.
 - (b) Calibration excludes sensors; sensor response and comparison shall be done in lieu of.
 - (c) Manual isolation pushbuttons are tested at least once per operating cycle during shutdown. All other circuitry associated with manual isolation shall receive a CHANNEL FUNCTIONAL TEST at least once per 92 days as part of the circuitry required to be tested for the automatic system isolation.



REFUELING OPERATIONS

3/4.9.3 CONTROL ROD POSITION

LIMITING CONDITIONS FOR OPERATION

3.9.3 All control rods shall be fully inserted.*

APPLICABILITY: OPERATING CONDITION 5 when loading fuel assemblies into the core.

ACTION:

With one or more control rods not fully inserted, suspend loading fuel assemblies into the core.

SURVEILLANCE REQUIREMENTS

4.9.3 All control rods shall be verified to be fully inserted at least once per 12 hours during loading of fuel assemblies into the core.

* Except control rods removed per Specification 3.9.10.1 or 3.9.10.2 or with one control rod withdrawn under control of reactor mode switch Refuel position one-rod-out interlock.



3/4.9 REFUELING OPERATIONS

BASES

3/4.9.1 REACTOR MODE SWITCH

Locking the OPERABLE reactor mode switch in the Shutdown or Refuel position, as specified, ensures that the restrictions on control rod withdrawal and refueling platform movement during the refueling operations are properly activated. These conditions reinforce the refueling procedures and reduce the probability of inadvertent criticality, damage to reactor internals or fuel assemblies, and exposure of personnel to excessive radioactivity.

3/4.9.2 INSTRUMENTATION

The OPERABILITY of at least two source range monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core. The SRMs are provided to monitor the core during periods of station shutdown and to guide the operator during refueling operations and station startup. Requiring two operable SRMs, one in and one adjacent to any core quadrant where fuel or control rods are being moved, assures adequate monitoring of that quadrant during such alterations. The requirement of 3 counts per second provides assurance that neutron flux is being monitored.

A spiral unloading pattern is one by which the fuel in the outermost cells (four fuel bundles surrounding a control blade) is removed first. Unloading continues by removing the remaining outermost fuel by cell. The last cell removed will be adjacent to an SRM. Spiral reloading is the reverse of unloading. Spiral unloading and reloading will preclude the creation of flux traps (moderator filled or partially filled cells surrounded on all sides by fuel).

During spiral unloading, the SRMs shall have an initial count rate of at least 3 cps with all rods fully inserted. It is expected that the count rate of the SRMs will drop below 3 cps before all of the fuel is unloaded. Since there will be no reactivity additions, a lower number of counts will not present a hazard. When all of the fuel has been removed to the spent fuel storage pool, the SRMs will no longer be required. Requiring an SRM to be operational prior to fuel removal from around that SRM assures that the SRMs are OPERABLE and can be relied upon when the count rate goes below the required minimum.

During spiral reload, SRM operability will be verified by using a portable external source once every 12 hours until the required amount of fuel is loaded to maintain 3 cps. As an alternative to the above, four fuel assemblies will be loaded in cells containing control blades around one SRM to obtain the required count rate. The loading of up to four bundles around the SRMs before attaining the required count rate is permissible because analysis has shown that an array of four fuel bundles in any configuration will remain subcritical. Until these four assemblies have been loaded, the 3 cps (or 1.3 cps) requirement is not necessary.

3/4.9.3 CONTROL ROD POSITION

The requirement that all control rods be inserted during loading of fuel assemblies into the core ensures that fuel will not be loaded into a cell without a control rod.

