

- (4) Pursuant to the Act and 10 CFR Parts 30, 40, 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility, and to receive and possess, but not separate, such source, byproduct, and special nuclear materials as contained in the fuel assemblies and fuel channels from the Shoreham Nuclear Power Station.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below) and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Exelon Generation Company is authorized to operate the facility at reactor core power levels of 3458 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 153, are hereby incorporated into this license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Fire Protection (Section 9.5, SSER-2, -4)\*

Exelon Generation Company shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for the facility, and as approved in the NRC Safety Evaluation Report dated August 1983 through Supplement 9, dated August 1989, and Safety Evaluation dated November 20, 1995, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

\*The parenthetical notation following the title of license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

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## DEFINITIONS

### LOGIC SYSTEM FUNCTIONAL TEST

1.20 A LOGIC SYSTEM FUNCTIONAL TEST shall be a test of all logic components, i.e., all relays and contacts, all trip units, solid state logic elements, etc, of a logic circuit, from sensor through and including the actuated device, to verify OPERABILITY. The LOGIC SYSTEM FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total system steps such that the entire logic system is tested.

### LOW (POWER) TRIP SETPOINT (LTSP)

1.20a The low power trip setpoint associated with the Rod Block Monitor (RBM) rod block trip setting applicable between 30% and 65% reactor thermal power.

1.21 (Deleted)

### MEMBER(S) OF THE PUBLIC

1.22 MEMBER OF THE PUBLIC means any individual except when that individual is receiving an occupational dose.

### MAPFAC(F)-(MAPLHGR FLOW FACTOR)

1.22a A core flow dependent multiplication factor used to flow bias the standard Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) limit.

### MAPFAC(P)-(POWER DEPENDENT MAPLHGR MULTIPLIER)

1.22b A core power dependent multiplication factor used to power bias the standard Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) limit.

### MINIMUM CRITICAL POWER RATIO (MCPR)

1.23 The MINIMUM CRITICAL POWER RATIO (MCPR) shall be the smallest CPR which exists in the core (for each class of fuel). Associated with the minimum critical power ratio is a core flow dependent (MCPR(F)) and core power dependent (MCPR(P)) minimum critical power ratio.

### OFFSITE DOSE CALCULATION MANUAL

1.24 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints, and in the conduct of the Radiological Environmental Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.9.1.7 and 6.9.1.8.

### OPERABLE - OPERABILITY

1.25 A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s) and when all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its function(s) are also capable of performing their related support function(s).

Section 3.3.7.2 (Deleted)

THE INFORMATION FROM THIS TECHNICAL SPECIFICATIONS SECTION HAS BEEN RELOCATED TO THE TRM. TECHNICAL SPECIFICATIONS PAGES 3/4 3-69 THROUGH 3/4 3-72 OF THIS SECTION HAVE BEEN INTENTIONALLY OMITTED. .

THE INFORMATION FROM THIS TECHNICAL  
SPECIFICATIONS SECTION HAS BEEN  
RELOCATED TO THE TRM.  
TECHNICAL SPECIFICATIONS PAGE 3/4 3-111  
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## REACTOR COOLANT SYSTEM

### 3/4.4.3 REACTOR COOLANT SYSTEM LEAKAGE

#### LEAKAGE DETECTION SYSTEMS

#### LIMITING CONDITION FOR OPERATION

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3.4.3.1 The following reactor coolant leakage detection systems shall be OPERABLE:

- a. The primary containment atmosphere gaseous radioactivity monitoring system,
- b. The drywell floor drain sump flow monitoring system,
- c. The drywell unit coolers condensate flow rate monitoring system, and
- d. The primary containment pressure and temperature monitoring system.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.\*

\* - The primary containment gaseous radioactivity monitor is not required to be operable until Operational Condition 2.

#### ACTIONS:

- A. With the primary containment atmosphere gaseous radioactivity monitoring system inoperable, analyze grab samples of primary containment atmosphere at least once per 12 hours AND restore primary containment atmosphere gaseous radioactivity monitoring system to OPERABLE status within 30 days.
- B. With the drywell floor drain sump flow monitoring system inoperable, restore the drywell floor drain sump flow monitoring system to OPERABLE status within 30 days AND increase monitoring frequency of drywell unit cooler condensate flow rate (SR 4.4.3.2.1.c) to once every 8 hours.
- C. With the drywell unit coolers condensate flow rate monitoring system inoperable, AND the primary containment atmosphere gaseous radioactivity monitoring system OPERABLE, perform a channel check of the primary containment atmosphere gaseous radioactivity monitoring system (SR 4.4.3.1.a) once per 8 hours.
- D. With the primary containment pressure and temperature monitoring system inoperable, restore the primary containment pressure and temperature monitoring system to OPERABLE status within 30 days. Note: All other Tech Spec Limiting Conditions For Operation and Surveillance Requirements associated with the primary containment pressure/temperature monitoring system still apply. Affected Tech Spec Sections include: 3/4.3.7.5, 4.4.3.2.1, 3/4.6.1.6, and 3/4.6.1.7.
- E. With the primary containment atmosphere gaseous radioactivity monitoring system inoperable AND the drywell unit coolers condensate flow rate monitoring system inoperable, restore the primary containment atmosphere gaseous radioactivity monitoring system to OPERABLE status within 30 days OR restore the drywell unit coolers condensate flow rate monitoring system to OPERABLE status within 30 days. With the primary containment atmosphere gaseous radioactivity monitoring system inoperable, analyze grab samples of primary containment atmosphere at least once per 12 hours.

## REACTOR COOLANT SYSTEM

### ACTIONS (Continued)

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F. With any other two or more leak detection systems inoperable other than ACTION E above OR with required Actions and associated Completion Time of ACTIONS A, B, C, D or E not met, be in HOT SHUTDOWN within 12 hours AND in COLD SHUTDOWN within the next 24 hours.

### SURVEILLANCE REQUIREMENTS

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4.4.3.1 The reactor coolant system leakage detection systems shall be demonstrated operable by:

- a. Perform a CHANNEL CHECK of the primary containment atmosphere gaseous radioactivity monitoring system in accordance with the Surveillance Frequency Control Program.
- b. Perform a CHANNEL FUNCTIONAL TEST of required leakage detection instrumentation in accordance with the Surveillance Frequency Control Program. This does not apply to containment pressure and temperature monitoring system.
- c. Perform a CHANNEL CALIBRATION of required leakage detection instrumentation in accordance with the Surveillance Frequency Control Program. This does not apply to containment pressure and temperature monitoring system.
- d. Monitor primary containment pressure AND primary containment temperature in accordance with the Surveillance Frequency Control Program.

### 3/4.5 EMERGENCY CORE COOLING SYSTEMS

#### 3/4.5.1 ECCS - OPERATING

#### LIMITING CONDITION FOR OPERATION

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3.5.1 The emergency core cooling systems shall be OPERABLE with:

- a. The core spray system (CSS) consisting of two subsystems with each subsystem comprised of:
  1. Two OPERABLE CSS pumps, and
  2. An OPERABLE flow path capable of taking suction from the suppression chamber and transferring the water through the spray sparger to the reactor vessel.
- b. The low pressure coolant injection (LPCI) system of the residual heat removal system consisting of four subsystems with each subsystem comprised of:
  1. One OPERABLE LPCI pump, and
  2. An OPERABLE flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel.
- c. The high pressure coolant injection (HPCI) system consisting of:
  1. One OPERABLE HPCI pump, and
  2. An OPERABLE flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel.
- d. The automatic depressurization system (ADS) with at least five OPERABLE ADS valves.

APPLICABILITY: OPERATIONAL CONDITION 1, 2\* \*\* #, and 3\* \*\* ##.

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\*The HPCI system is not required to be OPERABLE when reactor steam dome pressure is less than or equal to 200 psig.

\*\*The ADS is not required to be OPERABLE when the reactor steam dome pressure is less than or equal to 100 psig.

#See Special Test Exception 3.10.6.

##Two LPCI subsystems of the RHR system may be inoperable in that they are aligned in the shutdown cooling mode when reactor vessel pressure is less than the RHR Shutdown cooling permissive setpoint.

CONTAINMENT SYSTEMS

DRYWELL AVERAGE AIR TEMPERATURE

LIMITING CONDITION FOR OPERATION

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3.6.1.7 Drywell average air temperature shall not exceed 145°F.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

With the drywell average air temperature greater than 145°F, reduce the average air temperature to within the limit within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

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4.6.1.7 The drywell average air temperature shall be the volumetric average of the temperatures at the following locations and shall be determined to be within the limit in accordance with the Surveillance Frequency Control Program:

	<u>Approximate Elevation</u>	<u>Number of Installed Sensors*</u>
a.	330'	3
b.	320'	3
c.	260'	3
d.	248'	6

\* At least one reading from each elevation is required for a volumetric average calculation.

## CONTAINMENT SYSTEMS

### 3/4.6.3 PRIMARY CONTAINMENT ISOLATION VALVES

#### LIMITING CONDITION FOR OPERATION

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3.6.3 Each primary containment isolation valve and each instrumentation line excess flow check valve shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one or more of the primary containment isolation valves inoperable,\*\* maintain at least one isolation valve OPERABLE in each affected penetration that is open and within 4 hours either:
  1. Restore the inoperable valve(s) to OPERABLE status, or
  2. Isolate each affected penetration by use of at least one deactivated automatic valve secured in the isolated position,\* or
  3. Isolate each affected penetration by use of at least one closed manual valve or blind flange.\*

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

- b. With one or more of the instrumentation line excess flow check valves inoperable, operation may continue and the provisions of Specification 3.0.3 are not applicable provided that within 4 hours either:
  1. The inoperable valve is returned to OPERABLE status, or
  2. The instrument line is isolated and the associated instrument is declared inoperable.

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

- c. With one or more scram discharge volume vent or drain valves inoperable, perform the applicable actions specified in Specification 3.1.3.1.

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\* Isolation valves closed to satisfy these requirements may be reopened on an intermittent basis under administrative control.

\*\* Except for the scram discharge volume vent and drain valves.

THE INFORMATION FROM THIS TECHNICAL SPECIFICATIONS  
SECTION HAS BEEN RELOCATED TO THE TRM.

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## PLANT SYSTEMS

### LIMITING CONDITION FOR OPERATION (Continued)

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#### ACTION: (Continued)

- c. Restore CRE boundary to operable status within 90 days or be in HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. In OPERATIONAL CONDITION 4, 5 or when RECENTLY IRRADIATED FUEL is being handled in the secondary containment, or during operations with a potential for draining the reactor vessel:
  1. With one control room emergency fresh air supply subsystem inoperable for reasons other than Condition b.3, restore the inoperable subsystem to OPERABLE status within 7 days, or initiate and maintain operation of the OPERABLE subsystem in the radiation isolation mode of operation.
  2. With both control room emergency fresh air supply subsystem inoperable for reasons other than Condition b.3, immediately suspend handling of RECENTLY IRRADIATED FUEL in the secondary containment and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.
  3. With one or more control room emergency fresh air subsystems inoperable due to an inoperable CRE boundary, immediately suspend handling of RECENTLY IRRADIATED FUEL in the secondary containment and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

### SURVEILLANCE REQUIREMENTS

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4.7.2.1 Each control room emergency fresh air supply subsystem shall be demonstrated OPERABLE:

- a. In accordance with the Surveillance Frequency Control Program by verifying the control room air temperature to be less than or equal to 85°F effective temperature.
- b. In accordance with the Surveillance Frequency Control Program on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates with the heaters OPERABLE.
- c. In accordance with the Surveillance Frequency Control Program or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire, or chemical release in any ventilation zone communicating with the subsystem by:
  1. Verifying that the subsystem satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 3000 cfm ± 10%.

## ELECTRICAL POWER SYSTEMS

### A.C. SOURCES - SHUTDOWN

#### LIMITING CONDITION FOR OPERATION

---

3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Two diesel generators each with:
  1. A day fuel tank containing a minimum of 200 gallons of fuel.
  2. A fuel storage system containing a minimum of 33,500 gallons of fuel.
  3. A fuel transfer pump.

APPLICABILITY: OPERATIONAL CONDITIONS 4, 5, and \*.

#### ACTION:

- a. With less than the above required A.C. electrical power sources OPERABLE, suspend CORE ALTERATIONS, handling of irradiated fuel in the secondary containment, operations with a potential for draining the reactor vessel and crane operations over the spent fuel storage pool when fuel assemblies are stored therein. In addition, when in OPERATIONAL CONDITION 5 with the water level less than 22 feet above the reactor pressure vessel flange, immediately initiate corrective action to restore the required power sources to OPERABLE status as soon as practical.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.8.1.2 At least the above required A.C. electrical power sources shall be demonstrated OPERABLE per Surveillance Requirements 4.8.1.1.1 and 4.8.1.1.2.

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\*When handling irradiated fuel in the secondary containment.

Section 3/4 8.4.1 (Deleted)

THE INFORMATION FROM THIS TECHNICAL SPECIFICATION SECTION  
HAS BEEN RELOCATED TO THE TRM. TECHNICAL SPECIFICATIONS  
PAGES 3/4 8-21 THROUGH 3/4 8-26 OF THIS SECTION HAVE BEEN  
INTENTIONALLY OMITTED.