

(1) Maximum Power Level

PSEG Nuclear LLC is authorized to operate the facility at a steady state reactor core power level not in excess of 3459 megawatts (one hundred percent of rated core power).

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 286, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Deleted Per Amendment 22, 11-20-79

(4) Less than Four Loop Operation

PSEG Nuclear LLC shall not operate the reactor at power levels above P-7 (as defined in Table 3.3-1 of Specification 3.3.1.1 of Appendix A to this license) with less than four (4) reactor coolant loops in operation until safety analyses for less than four loop operation have been submitted by the licensee and approval for less than four loop operation at power levels above P-7 has been granted by the Commission by Amendment of this license.

(5) PSEG Nuclear LLC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report, and as approved in the NRC Safety Evaluation Report dated November 20, 1979, and in its supplements, subject to the following provision:

PSEG Nuclear LLC 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.

(17) Upon implementation of Amendment No. 286 adopting TSTF-448, Revision 3, the determination of control room envelope (CRE) unfiltered air inleakage as required by SR 4.7.6.2, in accordance with TS 6.18.c.(i), the assessment of CRE habitability as required by Specification 6.18.c.(ii), and the measurement of CRE pressure as required by Specification 6.18.d, shall be considered met. Following implementation:

- a. The first performance of SR 4.7.6.2, in accordance with Specification 6.18.c. (i), shall be within the specified frequency of 6 years, plus the 18 month allowance of SR 4.0.2, as measured from June 4, 2003, the date of the most recent successful tracer gas test, as stated in the December 9, 2003 letter response to Generic Letter 2003-01, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.
- b. The first performance of the periodic assessment of CRE habitability, Specification 6.18.c(ii), shall be 3 years, plus the 9 month allowance of SR 4.0.2, as measured from June 4, 2003, the date of the most recent successful tracer gas test, as stated in the December 9, 2003 letter response to Generic Letter 2003-01, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years.
- c. The first performance of the periodic measurement of CRE pressure, Specification 6.18.d, shall be within 18 months, plus the 138 days allowed by SR 4.0.2, as measured from September 22, 2005, the date of the most recent successful pressure measurement test, or within 138 days if not performed previously.

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ADMINISTRATIVE CONTROLS

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3/4.7.6 CONTROL ROOM EMERGENCY AIR CONDITIONING SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6.1 The common control room emergency air conditioning system (CREACS)* shall be OPERABLE with:

- a. Two independent air conditioning filtration trains (one from each unit) consisting of:
 1. Two fans and associated outlet dampers,
 2. One cooling coil,
 3. One charcoal adsorber and HEPA filter array,
 4. Return air isolation damper.
- b. All other automatic dampers required for operation in the pressurization or recirculation modes.
- c. The control room envelope intact.

NOTE: The control room envelope (CRE) boundary may be opened intermittently under administrative control.

APPLICABILITY: ALL MODES and during movement of irradiated fuel assemblies.

ACTION: MODES 1, 2, 3, and 4

- a. With one filtration train inoperable, align CREACS for single filtration train operation within 4 hours, and restore the inoperable filtration train to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With CREACS aligned for single filtration train operation and with one of the two remaining fans or associated outlet damper inoperable, restore the inoperable fan or damper to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With the Control Room Envelope boundary inoperable:
 1. Immediately, initiate action to implement mitigating actions, and
 2. Within 24 hours, verify mitigating actions ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits, and
 3. Within 90 days, restore the Control Room Envelope boundary to OPERABLE status, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

* The CREACS is a shared system with Salem Unit 2

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LIMITING CONDITION FOR OPERATION (Continued)

- d. With one or both series isolation damper(s) on a normal Control Area Air Conditioning System (CAACS) outside air intake or exhaust duct inoperable, close the affected duct within 4 hours by use of at least one isolation damper secured in the closed position or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. (Refer to ACTION 25 of Table 3.3-6.)
- e. With one or both isolation damper(s) on an outside emergency air conditioning air intake duct inoperable, close the affected duct within 4 hours by use of at least one isolation damper secured in the closed position and restore the damper(s) to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- f. With any isolation damper between the normal CAACS and the CREACS inoperable, secure the damper in the closed position within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6 or during movement of irradiated fuel assemblies

- a. With one filtration train inoperable, align CREACS for single filtration train operation within 4 hours, or suspend movement of irradiated fuel assemblies.
- b. With CREACS aligned for single filtration train operation with one of the two remaining fans or associated outlet damper inoperable, restore the fan or damper to OPERABLE status within 72 hours, or suspend movement of irradiated fuel assemblies.
- c. With two filtration trains inoperable, immediately suspend movement of irradiated fuel assemblies.
- d. With the Control Room Envelope boundary inoperable, immediately suspend movement of irradiated fuel assemblies.
- e. With one or both series isolation damper(s) on a normal CAACS outside air intake or exhaust duct inoperable, immediately suspend movement of irradiated fuel assemblies until the affected duct is closed by use of at least one isolation damper secured in the closed position. (Refer to ACTION 25 of Table 3.3-6.)
- f. With one or both series isolation damper(s) on an outside emergency air conditioning air intake duct inoperable, immediately suspend movement of irradiated fuel assemblies until the affected duct is closed by use of at least one isolation damper secured in the closed position. To resume movement of irradiated fuel assemblies, at least one emergency air intake duct must be operable on each unit.
- g. With any isolation damper between the CAACS and the CREACS inoperable, immediately suspend movement of irradiated fuel assemblies until the damper is closed and secured in the closed position.

SURVEILLANCE REQUIREMENTS

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4.7.6.1 Each control room emergency air conditioning system filtration train shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating flow through the HEPA filter and charcoal adsorber train(s) and verifying that the train(s) operates with each fan operating for at least 15 minutes.
- b. At least once per 18 months or prior to return to service (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 system, by:
 1. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place while operating the ventilation system at a flow rate of 8000 cfm $\pm 10\%$.
 2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place while operating the ventilation system at a flow rate of 8000 cfm $\pm 10\%$.
 3. Verifying within 31 days after removal from the CREACS unit, that a laboratory test of a sample of the charcoal adsorber, when obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows the methyl iodide penetration less than 2.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and a relative humidity of 95%.
- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal from the CREACS unit, that a laboratory analysis of a representative carbon sample, when obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows a methyl iodide penetration less than 2.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and a relative humidity of 95%.
- d. At least once per 18 months by:
 1. Verifying that the pressure drop across the combined HEPA filter and charcoal adsorber bank is ≤ 3.5 inches water gauge while operating the ventilation system at a flow rate of 8000 cfm $\pm 10\%$.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 2.* Verifying that on a safety injection test signal or control room intake high radiation test signal, the system automatically actuates in the pressurization mode by opening the outside air supply and diverting air flow through the HEPA filter and charcoal adsorber bank.
3. Deleted.
4. Verifying that on a manual actuation signal, the system will actuate to the required pressurization or recirculation operating mode.
5. Verify each CREACS train has the capability to remove the assumed heat load.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place while operating the filter system at a flow rate of 8000 cfm $\pm 10\%$.
- f. After each complete or partial replacement of a charcoal absorber bank by verifying that the charcoal absorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place while operating the filter system at a flow rate of 8000 cfm $\pm 10\%$.

4.7.6.2 Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Habitability Program (Refer to TS 6.18).

* A one time extension to this surveillance requirement which is satisfied by performance of the Manual SI test is granted during fuel cycle thirteen allowing Unit 1 operations to continue to the thirteenth refueling outage (1R13). The surveillance testing is to be completed at the appropriate time during the 1R13 outage, prior to the unit returning to Mode 4 upon outage completion.

- c. Proposed changes to the Bases that require either condition of Specification 6.17.b above shall be reviewed and approved by the NRC prior to implementation.
- d. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).
- e. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.

6.18 CONTROL ROOM ENVELOPE HABITABILITY PROGRAM

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Control Room Emergency Air Conditioning System (CREACS), CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem total effective dose equivalent (TEDE) for the duration of the accident. The program shall include the following elements:

- a. The definition of the CRE and the CRE boundary.
- b. Requirements for maintaining the CRE boundary in its design condition including configuration control and preventive maintenance.
- c. Requirements for (i) determining the unfiltered air leakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing CRE habitability at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, Revision 0.
- d. Measurement, at designated locations, of the CRE pressure relative to all external areas adjacent to the CRE boundary during the pressurization mode of operation by one train of the CREACS, operating at the flow rate required by the Surveillance Requirements, at a frequency of 36 months on a STAGGERED TEST BASIS. The results shall be trended and used as part of the 18 month assessment of the CRE boundary.
- e. The quantitative limits on unfiltered air leakage into the CRE. These limits shall be stated in a manner to allow direct comparison to the unfiltered air leakage measured by the testing described in paragraph c. The unfiltered air leakage limit for radiological challenges is the leakage flow rate assumed in the licensing basis analyses of DBA consequences. Unfiltered air leakage limits for hazardous chemicals must ensure that exposure of CRE occupants to these hazards will be within the assumptions in the licensing basis.
- f. The provisions of Surveillance Requirements 4.0.2 are applicable to the Frequencies for assessing CRE habitability, determining CRE unfiltered leakage, and measuring CRE pressure and assessing the CRE boundary as required by paragraphs c and d, respectively.