

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY

LIMITING CONDITION FOR OPERATION

3.0.1 Limiting Conditions for Operation and ACTION requirements shall be applicable during the OPERATIONAL CONDITIONS or other states specified for each specification.

3.0.2 Adherence to the requirements of the Limiting Condition for Operation and associated ACTION within the specified time interval shall constitute compliance with the specification. In the event the Limiting Condition for Operation is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.

3.0.3 In the event a Limiting Condition for Operation and/or associated ACTION requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in at least HOT SHUTDOWN within 6 hours and in COLD SHUTDOWN within the following 30 hours unless corrective measures are completed that permit operation under the permissible ACTION statements for the specified time interval as measured from initial discovery or until the reactor is placed in an OPERATIONAL CONDITION in which the specification is not applicable. Exceptions to these requirements shall be stated in the individual specifications.

When a limiting condition for operation is not met,

3.0.4 ~~Entry into an OPERATIONAL CONDITION or other specified applicability state shall not be made, unless the conditions of the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION statements unless otherwise excepted.~~ This <sup>specification</sup> provision shall not prevent ~~changes thru OPERATIONAL CONDITIONS~~ <sup>or other specified applicability states that are</sup> required to comply with ACTION requirements.

3.0.5 When a system, subsystem, train, component, or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystem(s), train(s), component(s), and device(s) are OPERABLE, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, the unit shall be placed in at least HOT SHUTDOWN within 6 hours, and in at least COLD SHUTDOWN within the following 30 hours. This specification is not applicable in Conditions 4 or 5.

Exceptions to this specification are stated in the individual specifications. These exceptions allow entry into OPERATIONAL CONDITIONS or other specified applicability states when the associated actions to be entered allow unit operation in the OPERATIONAL CONDITIONS or other specified applicability states only for a limited period of time.

except when the associated actions to be entered permit continued operation in the OPERATIONAL CONDITION or other specified applicability states for an unlimited period of time.

BRUNSWICK - UNIT 1

3/4 0-1

APPLICABILITY

SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance Requirements shall be applicable during the OPERATIONAL CONDITIONS or other states specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval.

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~~4.0.3 Performance of a Surveillance Requirement within the specified time interval shall constitute compliance with OPERABILITY requirements for a Limiting Condition for Operation and associated ACTION statements unless otherwise required by the specification. Surveillance requirements do not have to be performed on inoperable equipment.~~

4.0.4 Entry into an OPERATIONAL CONDITION or other specified applicable state shall not be made unless the ~~Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the applicable surveillance interval or as otherwise specified.~~

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

- a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g) (6) (i).

This provision shall not prevent entry into OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

Limiting Condition for Operation's surveillances have been met within the specified frequency.

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4.0.3 If it is discovered that a Surveillance Requirement was not performed within its specified time interval, then compliance with the requirement to declare the Limiting Condition for Operation not met may be delayed, from the time of the discovery, up to 24 hours or up to the period of the specified time interval, whichever is less. The delay period is permitted to allow performance of the Surveillance Requirement.

If the Surveillance Requirement is not performed within the delay period, the Limiting Condition for Operation must immediately be declared not met, and the applicable ACTION(S) must be entered.

When the Surveillance Requirement is performed within the delay period and the Surveillance Requirement is not met, the Limiting Condition for Operation must immediately be declared not met, and the applicable ACTION(S) must be entered.

Surveillance requirements do not have to be performed on inoperable equipment.

## REACTIVITY CONTROL SYSTEMS

### CONTROL ROD DRIVE COUPLING

#### LIMITING CONDITION FOR OPERATION

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3.1.3.6 All control rods shall be coupled to their drive mechanisms.

APPLICABILITY: CONDITIONS 1, 2, and 5\*.

#### ACTION:

- a. In CONDITION 1 or 2 with one control rod not coupled to its associated drive mechanism, ~~the provisions of Specification 3.0.4 are not applicable and~~ operation may continue provided:
  1. Within the preset power level of the RWM, the control rod is declared inoperable and fully inserted until recoupling can be attempted with THERMAL POWER above the preset power level of the RWM and the requirements of Specification 3.1.4.1.d are satisfied.
  2. Above the preset power level of the RWM, the control rod drive is inserted to accomplish recoupling. If recoupling is not accomplished on the first attempt, declare the control rod inoperable, fully insert the control rod, and electrically disarm the directional control valves.
  3. The requirements of Specification 3.1.3.1 are satisfied.
- b. In CONDITION 5\*, with a withdrawn control rod not coupled to its associated drive mechanism, insert the control rod to accomplish recoupling. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.1.3.6 The coupling integrity of a control rod shall be demonstrated by withdrawing the control rod to the fully withdrawn position and verifying that the rod does not go to the overtravel position:

- a. Prior to reactor criticality after completing CORE ALTERATIONS that could have affected the control rod drive coupling integrity,

\*At least each withdrawn control rod. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.



REACTIVITY CONTROL SYSTEMS

3/4 1.4 CONTROL ROD PROGRAM CONTROLS

ROD WORTH MINIMIZER

LIMITING CONDITION FOR OPERATION

3.1.4.1 The Rod Worth Minimizer (RWM) shall be OPERABLE when THERMAL POWER is less than 10% of RATED THERMAL POWER.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2\*.

ACTION:

- a. With the RWM inoperable after the first 12 control rods have been fully withdrawn on a startup, operation may continue provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- b. With the RWM inoperable before the first 12 control rods are withdrawn on a startup, one startup per calendar year may be performed provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- c. With RWM inoperable on a shutdown, shutdown may continue provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- d. With RWM operable but individual control rod(s) declared inoperable, operation and control rod movement below the preset power level of the RWM may continue provided:
  1. No more than three (3) control rods are declared inoperable in any one BPWS group, and,
  2. The inoperable control rod(s) is bypassed on the RWM and control rod movement of the bypassed rod(s) is verified by a second licensed operator or qualified member of the plant technical staff.

~~e. With RWM inoperable, the provisions of Specification 3.0.4 are not applicable.~~

\* Entry into OPERATIONAL CONDITION 2 and withdrawal of selected control rods is permitted for the purpose of determining the OPERABILITY of the RWM prior to withdrawal of control rods for the purpose of bringing the reactor to criticality.

## INSTRUMENTATION

### 3/4.3.5 MONITORING INSTRUMENTATION

#### SEISMIC MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.5.1 The seismic monitoring instrumentation shown in Table 3.3.5.1-1 shall be OPERABLE.

APPLICABILITY: At all times.

#### ACTION:

- a. With one or more seismic monitoring instruments inoperable for more than 31 days, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission, within the next 14 days, outlining the cause of the malfunction and the plans for restoring the instruments to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.3.5.1.1 Each of the above required seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3.5.1-1.

4.3.5.1.2 Each of the above required seismic monitoring instruments actuated during a seismic event shall be restored to OPERABLE status within 24 hours and a CHANNEL CALIBRATION performed within 5 days following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. In lieu of any other report required by Specification 6.9.1, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 14 days describing the magnitude, frequency spectrum, and resultant effect upon facility features important to safety.

INSTRUMENTATION

ACCIDENT MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

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3.3.5.3 The accident monitoring instrumentation channels shown in Table 3.3.5.3-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.5.3-1.

ACTION:

- a. With one or more accident monitoring instrumentation channels inoperable, take the ACTION required by Table 3.3.5.3-1.
- b. ~~The provisions of Specification 3.0.4 are not applicable.~~

SURVEILLANCE REQUIREMENTS

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4.3.5.3 Each of the above required accident monitoring instrumentation channels shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.5.3-1.

(c) The provisions of Specification 3.0.4 are not applicable.

TABLE 3.3.5.3-1

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. Reactor Vessel Pressure (c)	2	1	1, 2	82
2. Reactor Vessel Water Level (c)	2	1	1, 2	82
3. Suppression Chamber Water Level (c)	2	1	1, 2	82
4. Suppression Chamber Water Temperature (c)	2	1	1, 2	82 (b)
5. Suppression Chamber Atmosphere Temperature (c)	2	1	1, 2	82 (b)
6. Drywell Pressure (c)	2	1	1, 2	82
7. Drywell Temperature (c)	2	1	1, 2	82 (b)
8. Drywell Radiation	2	2	1, 2, 3	81
9. Drywell Oxygen Concentration (c)	2	1	1, 2	82
10. Drywell Hydrogen Concentration Analyzer and Monitor (c)	2	1	1, 2	82
11. Drywell Area Radiation Monitors	2	2	1, 2	81
12. Safety/Relief Valve Position Indication (c) a. Primary - Sonic b. Secondary - Temp.	2/valve	1/valve	1, 2	82
13. Turbine Building Ventilation Monitor (a)	1	1	1, 2, 3	81
14. Off-gas Stack Ventilation Monitor (a)	1	1	1, 2, 3	81

(a) High range noble gas monitors.

(b) See also specification 3.6.2.1 for ACTION requirements for the Suppression Pool Temperature Monitoring System Instrumentation.

INSTRUMENTATION

CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

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3.3.5.5 The Control Room Emergency Ventilation System instrumentation shown in Table 3.3.5.5-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.5.5-1.

ACTION:

- a. With one or more detectors inoperable, take the ACTION required by Table 3.3.5.5-1.
- b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.3.5.5 Each of the above required control room emergency ventilation instruments shall be demonstrated OPERABLE by performance of the testing at the frequency required by Table 4.3.5.5-1.



INSTRUMENTATION

CHLORIDE INTRUSION MONITOR

LIMITING CONDITION FOR OPERATION

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3.3.5.6 The chloride intrusion monitor channels shown in Table 3.3.5.6-1 shall be OPERABLE with alarm setpoints set consistent with the values shown in the Trip Setpoint columns of Table 3.3.5.6-2.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION:

- a. With one or two of the functional units shown in Table 3.3.5.6-1 inoperable, operation may continue. ~~and the provisions of Specification 3.0.4 are not applicable.~~
- b. With three of the functional units shown in Table 3.3.5.6-1 inoperable, sample at least one parameter monitored by the inoperable functional units at least once per 4 hours. The provisions of Specifications 3.0.3 ~~and 3.0.4~~ are not applicable.
- c. With none of the functional units shown in Table 3.3.5.6-1 OPERABLE, be in at least HOT SHUTDOWN within 12 hours.

SURVEILLANCE REQUIREMENTS

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4.3.5.6 The chloride intrusion monitor channels shall be demonstrated OPERABLE by performing the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.5.6-1.

INSTRUMENTATION

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

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3.3.5.8 The radioactive liquid effluent monitoring instrumentation channels shown in Table 3.3.5.8-1 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.1.1 are not exceeded. The alarm/trip setpoints shall be determined in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY: As shown in Table 3.3.5.8-1.

ACTION:

- a. With a radioactive liquid effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, without delay suspend the release of radioactive liquid effluents monitored by the affected channel, declare the channel inoperable, or change the setpoint so it is acceptably conservative.
- b. With less than one radioactive liquid effluent monitoring instrumentation channel in each release pathway OPERABLE, take the ACTION shown in Table 3.3.5.8-1. Return the instruments to OPERABLE status within 30 days or, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.3.5.8 Each radioactive liquid effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3.5.8-1.

NOTE: See Bases 3/4.3.5.8.

INSTRUMENTATION

TSI 93-004-00

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.5.9 The radioactive gaseous effluent monitoring instrumentation channels shown in Table 3.3.5.9-1 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.1 are not exceeded. The setpoints shall be determined in accordance with the methodology as described in the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY: As shown in Table 3.3.5.9-1.

ACTION:

- a. With a radioactive gaseous effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, without delay suspend the release of radioactive gaseous effluents monitored by the affected channel, or declare the channel inoperable, or change the setpoint so it is acceptably conservative.
- b. With less than one radioactive gaseous effluent monitoring instrumentation channel OPERABLE, take the ACTION shown in Table 3.3.5.9-1. Return the instruments to OPERABLE status within 30 days or, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- c. The provisions of Specifications ~~3.0.3~~ and ~~3.0.4~~ are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.5.9 Each radioactive gaseous effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST at the frequencies shown in Table 4.3.5.9-1.

NOTE: See Bases 3/4.3.5.9.

PLANT SYSTEMS

3/4.7.6 SEALED SOURCE CONTAMINATION

LIMITING CONDITION FOR OPERATION

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3.7.6 Each sealed source containing radioactive material in excess of 100 microcuries of beta and/or gamma emitting material or 5 microcuries of alpha emitting material shall be free of greater than or equal to 0.005 microcuries of removable contamination.

APPLICABILITY: At all times.

ACTION:

Each sealed source with removable contamination in excess of the above limit shall be immediately withdrawn from use and:

- a. Either decontaminated and repaired, or
- b. Disposed of in accordance with Commission Regulations.

The Provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.7.6.1 Test Requirements - Each sealed source shall be tested for leakage and/or contamination by:

- a. The licensee, or
- b. Other persons specifically authorized by the Commission or an Agreement State.

The test method shall have a detection sensitivity of at least 0.005 microcuries per test sample.

4.7.6.2 Test Frequencies - Each category of sealed sources (excluding start-up sources and fission detectors previously subjected to core flux) shall be tested at the frequency described below.

- a. Sources in use - At least once per six months for all sealed sources containing radioactive material:

RADIOACTIVE EFFLUENTS

DOSE - LIQUID EFFLUENTS

LIMITING CONDITION FOR OPERATION

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3.11.1.2 The dose or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released to UNRESTRICTED AREAS (see Figure 5.1.3-1) shall be limited:

- a. During any calendar quarter to less than or equal to 3 mrem to the total body and to less than or equal to 10 mrem to any organ, and
- b. During any calendar year to less than or equal to 6 mrem to the total body and to less than or equal to 20 mrem to any organ.

APPLICABILITY: At all times.

ACTION:

- a. With the calculated doses from the release of radioactive materials in liquid effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions that have been taken to reduce the releases and the proposed corrective action to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.11.1.2 Dose Calculations - Cumulative dose contributions from liquid effluents for the current calendar quarter and the current calendar year shall be determined in accordance with the ODCM at least once per 31 days.

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NOTE: See Bases 3/4.11.1.2



RADIOACTIVE EFFLUENTS

LIQUID RADWASTE TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

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3.11.1.3 The liquid radwaste treatment system shall be used to reduce the radioactive materials in liquid wastes prior to their discharge when the projected doses due to the liquid effluent from the site to UNRESTRICTED AREAS (see Figure 5.1.3-1) would exceed 0.12 mrem to the total body or 0.4 mrem to any organ in a 31-day period.

APPLICABILITY: At all times.

ACTION:

- a. With radioactive liquid waste being discharged without treatment and in excess of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Explanation of why liquid radwaste was being discharged without treatment, identification of any inoperable equipment or sub-system, and reason for the inoperability.
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
  3. Summary of description of action(s) taken to prevent a recurrence.
- b. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.11.1.3 Doses due to liquid releases from the site to UNRESTRICTED AREAS shall be projected at least once per 31 days in accordance with the ODCM.

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NOTE. See Bases 3/4.11.1.3

RADIOACTIVE EFFLUENTS

LIQUID HOLDUP TANKS

Appropriate alternatives to the ACTIONS and Surveillance Requirements below can be accepted if they provide reasonable assurance that in the event of an uncontrolled release of the tanks' content, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

LIMITING CONDITION FOR OPERATION

3.11.1.4 The quantity of radioactive material suspended in solution in each of the following unprotected outdoor tanks shall be limited to less than or equal to the activity indicated below, excluding tritium and dissolved or entrained gases.

<u>OUTSIDE TANK</u>	<u>CURIE LIMIT</u>
a. Condensate Storage Tank	10 Ci
b. Outside Temporary Tank	10 Ci

APPLICABILITY: At all times.

ACTION:

- a. With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, without delay suspend all addition of radioactive material to the tank, within 48 hours reduce the tank's contents to within the limit, and describe the events leading to this condition in the next Semiannual Radioactive Effluent Release Report.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1.4 The quantity of radioactive material contained in each of the tanks listed shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

NOTE: See Bases 3.4.11.1.4

RADIOACTIVE EFFLUENTS

DOSE - NOBLE GASES

LIMITING CONDITION FOR OPERATION

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3.11.2.2 The air dose due to noble gases released in gaseous effluents from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation;
- b. During any calendar year: Less than or equal to 20 mrad for gamma radiation and less than or equal to 40 mrad for beta radiation.

APPLICABILITY: At all times.

ACTIONS:

- a. With the calculated air dose from radioactive noble gases in gaseous effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions to be taken to reduce the releases, and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.11.2.2 Dose Calculations - Cumulative dose contributions for noble gases for the current calendar quarter and current calendar year shall be determined in accordance with the ODCM at least once per 31 days.

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NOTE: See Bases 3/4.11.2.2

RADIOACTIVE EFFLUENTS

DOSE - IODINE-131, IODINE-133, TRITIUM, AND RADIONUCLIDES IN PARTICULATE FORM

LIMITING CONDITION FOR OPERATION

3.11.2.3 The dose to a MEMBER OF THE PUBLIC from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 15 mrems to any organ; and
- b. During any calendar year: Less than or equal to 30 mrems to any organ.
- c. Less than 0.1% of the limits of 3.11.2.3(a) and (b) as a result of burning contaminated oil.

APPLICABILITY: At all times.

ACTION:

- a. With the calculated dose from the release of iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit and defines the corrective actions that have been taken to reduce the releases and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.3 Dose Calculations - Cumulative dose contributions for the current calendar quarter and current calendar year for iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days shall be determined in accordance with the ODCM at least once per 31 days.

NOTE: See Bases 3/4.11.2.3

RADIOACTIVE EFFLUENTS

GASEOUS RADWASTE TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

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3.11.2.4 The GASEOUS RADWASTE TREATMENT SYSTEM shall be in operation.

APPLICABILITY: Whenever the main condenser air ejector (evacuation) system is in operation.

ACTION:

- a. With gaseous radwaste from the main condenser air ejector system being discharged without treatment for more than 7 days, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Identification of the inoperable equipment or subsystems and the reason for inoperability,
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
  3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.11.2.4 The readings of the relevant instruments shall be checked at least once per 12 hours when the main condenser air ejector is in use to ensure that the GASEOUS RADWASTE TREATMENT SYSTEM is functioning.

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NOTE: See Bases 3/4.11.2.4



RADIOACTIVE EFFLUENTS

VENTILATION EXHAUST TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

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3.11.2.5 The VENTILATION EXHAUST TREATMENT SYSTEM shall be used to reduce radioactive materials in gaseous waste prior to their discharge when the projected doses due to gaseous effluent releases, from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1), would exceed 0.6 mrem to any organ over 31 days.

APPLICABILITY: At all times other than when the VENTILATION EXHAUST TREATMENT SYSTEM is undergoing routine maintenance.

ACTION:

- a. With gaseous waste being discharged without treatment and in excess of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Identification of any inoperable equipment or subsystems and the reason for the inoperability;
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status; and
  3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.11.2.5 Doses due to gaseous releases from the site shall be projected at least once per 31 days, in accordance with the ODCM, when the VENTILATION EXHAUST TREATMENT SYSTEM is not in use.

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NOTE: See Bases 3/4.11.2.5

RADIOACTIVE EFFLUENTS

DRYWELL VENTING OR PURGING

LIMITING CONDITION FOR OPERATION

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3.11.2.8 The drywell shall be purged to the environment at a rate in conformance with Specification 3.11.2.1.

APPLICABILITY: Whenever the drywell is vented or purged.

ACTION:

- a. With the requirements of the above specification not satisfied, suspend all VENTING or PURGING of the drywell.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.11.2.8 A sample analysis, as defined in Table 4.11.2-1, shall be performed prior to each drywell PURGE.

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NOTE: See Bases 3/4.11.2.8

RADIOACTIVE EFFLUENTS

3/4.11.3 SOLID RADIOACTIVE WASTE

LIMITING CONDITION FOR OPERATION

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3.11.3 The solid radwaste system shall be used in accordance with a PROCESS CONTROL PROGRAM to process wet radioactive wastes to meet shipping and burial ground requirements.

APPLICABILITY: At all times.

ACTION:

- a. With the provisions of the PROCESS CONTROL PROGRAM not satisfied, suspend shipments of defectively processed or defectively packaged solid radioactive wastes from the site.
- b. The provisions of Specifications ~~3.0.3~~ and ~~3.0.4~~ are not applicable.

SURVEILLANCE REQUIREMENTS

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4.11.3 The PROCESS CONTROL PROGRAM shall be used to verify the SOLIDIFICATION of at least one representative test specimen from at least every tenth batch of each type of wet radioactive waste (e.g., filter sludges, spent resins, evaporator bottoms, and sodium sulfate solutions).

- a. If any test specimen fails to verify SOLIDIFICATION, the SOLIDIFICATION of the batch under test shall be suspended until such time as additional test specimens can be obtained, alternative SOLIDIFICATION parameters can be determined in accordance with the PROCESS CONTROL PROGRAM, and a subsequent test verifies SOLIDIFICATION. SOLIDIFICATION of the batch may then be resumed using the alternative SOLIDIFICATION parameters determined by the PROCESS CONTROL PROGRAM.
- b. If the initial test specimen from a batch of waste fails to verify SOLIDIFICATION, the PROCESS CONTROL PROGRAM shall provide for the collection of testing of representative test specimens from each consecutive batch of the same type of wet waste until at least 3 consecutive initial test specimens demonstrate SOLIDIFICATION. The PROCESS CONTROL PROGRAM shall be modified as required, as provided in Specification 6.14, to assure SOLIDIFICATION of subsequent batches of waste.

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NOTE: See Bases 3/4.11.3

RADIOACTIVE EFFLUENTS

3/4.11.4 TOTAL DOSE (40 CFR PART 190)

LIMITING CONDITION FOR OPERATION

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3.11.4 The annual (calendar year) dose or dose commitment to any MEMBER OF THE PUBLIC, due to releases of radioactivity and radiation from uranium fuel cycle sources shall be limited to less than or equal to 25 mrems to the total body or any organ (except the thyroid, which shall be limited to less than or equal to 75 mrems).

APPLICABILITY: At all times.

ACTION:

- a. With the calculated doses from the release of radioactive materials in liquid or gaseous effluents exceeding twice the limits of Specifications 3.11.1.2.a, 3.11.1.2.b, 3.11.2.2.a, 3.11.2.2.b, 3.11.2.3.a, or 3.11.2.3.b, calculations should be made which, in addition to doses due to effluents, include direct radiation contributions from the reactor units and from outside storage tanks to determine whether the above limits of Specification 3.11.4 have been exceeded. If such is the case, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days pursuant to Specification 3.9.2, a Special Report that defines the corrective action to be taken to reduce subsequent releases to prevent recurrence of exceeding the above limits and includes the schedule for achieving conformance with the above limits. This Special Report, as defined in 10 CFR Part 20.405c, shall include an analysis that estimates the radiation exposure (dose) to a MEMBER OF THE PUBLIC from uranium fuel cycle sources, including all effluent pathways and direct radiation, for the calendar year that includes the release(s) covered by this report. It shall also describe levels of radiation and concentrations of radioactive material involved and the cause of the exposure levels or concentrations. If the estimated dose(s) exceeds the above limits; and if the release condition resulting in violation of 40 CFR Part 190 has not already been corrected, the Special Report shall include a request for a variance in accordance with the provisions of 40 CFR Part 190. Submittal of the report is considered a timely request, and a variance is granted until Staff action on the request is complete.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

RADIOLOGICAL ENVIRONMENTAL MONITORING

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

environmental monitoring program within 30 days. The specific locations from which samples were unavailable may then be deleted from the monitoring program and ODCM. In lieu of a Licensee Event Report and pursuant to Specification 6.9.1.8, identify the cause of unavailability of samples; and identify the new location(s) for obtaining replacement samples in the next Semiannual Radioactive Effluent Release Report, and also include in the report a revised figure(s) and table for the ODCM reflecting the new location(s).

- d. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.12.1 The radiological environmental monitoring samples shall be collected pursuant to Table 3.12.1-1 from the specific locations given in the table and figure(s) in the ODCM and shall be analyzed pursuant to the requirements of Table 3.12.1-1 and the detection capabilities required by Table 4.12.1-1.

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NOTE: See Bases 3/4.12.1



3/4.12.2 LAND USE CENSUS

LIMITING CONDITION FOR OPERATION

3.12.2 A land use census shall be conducted and shall identify within a distance of 8 km (5 miles) the location in each of the 16 meteorological sectors of the nearest milk animal, the nearest resident, and the nearest garden of greater than 50 m<sup>2</sup> (500 ft<sup>2</sup>) producing broadleaf vegetation. (For elevated releases as defined in Regulatory Guide 1.111, Revision 1, July 1977, the land use census shall also identify within a distance of 5 km (3 miles) the location in each of the 16 meteorological sectors of all milk animals and all gardens of greater than 50 m<sup>2</sup> producing broadleaf vegetation.)

Broadleaf vegetable sampling of at least 3 different kinds of vegetation may be performed at the SITE BOUNDARY in each of 2 different direction sectors with the highest D/Qs in lieu of the garden census. Specifications for broadleaf vegetation sampling in Table 3.12.1-1(4c) shall be followed, including analysis of control samples.

APPLICABILITY: At all times.

ACTION:

- a. With a land use census identifying a location(s) that yields a calculated dose or dose commitment greater than the values currently being calculated in Specification 4.11.2.3, in lieu of a Licensee Event Report, identify the new location(s) in the next Semiannual Radioactive Effluent Release Report, pursuant to Specification 6.9.1.8.
- b. With a land use census identifying a location(s) that yields a calculated dose or dose commitment (via the same exposure pathway) 20 percent greater than at a location from which samples are currently being obtained in accordance with Specification 3.12.1, add the new location(s) to the radiological environmental monitoring program within 30 days. The sampling location(s), excluding the central station location, having the lowest calculated dose or dose commitment(s) (via this same exposure pathway) may be deleted from this monitoring program after October 31 of the year in which this land use census was conducted. In lieu of a Licensee Event Report and pursuant to Specification 6.9.1.8, identify the new location(s) in the next Semiannual Effluent Release Report; and also include in the report a revised figure(s) and table for the ODCM reflecting the new location(s).
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

RADIOLOGICAL ENVIRONMENTAL MONITORING

3/4.12.3 INTERLABORATORY COMPARISON PROGRAM

LIMITING CONDITION FOR OPERATION

---

3.12.3 Analyses shall be performed on radioactive materials supplied as part of an Interlaboratory Comparison Program that has been approved by the Commission.

APPLICABILITY: At all times.

ACTION:

- a. With analyses not being performed as required above, report the corrective actions taken to prevent a recurrence to the Commission in the Annual Radiological Environmental Operating Report pursuant to Specification 6.9.1.7.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.12.3 The Interlaboratory Comparison Program shall be described in the ODCM. A summary of the results, obtained as part of the above required Interlaboratory Comparison Program, shall be included in the Annual Radiological Environmental Operating Report pursuant to Specification 6.9.1.7.

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NOTE: See Bases 3/4.12.3

### 3/4.0 APPLICABILITY

#### BASES

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The specifications of this section provide the general requirements applicable to each of the Limiting Conditions for Operation and Surveillance Requirements within Section 3/4.

3.0.1 This specification states the applicability of each specification in terms of defined OPERATIONAL CONDITION and is provided to delineate specifically when each specification is applicable.

3.0.2 This specification defines those conditions necessary to constitute compliance with the terms of an individual Limiting Condition for Operation and associated ACTION requirement.

3.0.3 This specification delineates the ACTION to be taken for circumstances not directly provided for in the ACTION statements and whose occurrence would violate the intent of specification. For example, Specification 3.5.1 calls for the HPCI to be OPERABLE and specifies explicit requirements if it becomes inoperable. Under the terms of Specification 3.0.3, if the required additional systems are not OPERABLE, the facility is to be placed in HOT SHUTDOWN within the next 6 hours and be in COLD SHUTDOWN within the following 30 hours. The unit shall be brought to the required OPERATIONAL CONDITION within the required times by promptly initiating and carrying out an orderly shutdown. It is intended that this guidance also apply whenever an ACTION statement requires a unit to be in STARTUP within 2 hours or in HOT SHUTDOWN within 6 hours.

REPLACE WITH INSERT ATTACHED

3.0.4 This specification provides that entry into an OPERABLE CONDITION must be made with (a) the full complement of required systems, equipment or components OPERABLE and (b) all other parameters as specified in the Limiting Conditions for Operation being met without regard for allowable deviations and out-of-service provisions contained in the ACTION statements.

The intent of this provision is to ensure that facility operation is not initiated with either required equipment or systems inoperable or other limits being exceeded.

Exceptions to this provision have been provided for a limited number of specifications when startup with inoperable equipment would not affect plant safety. These exceptions are stated in the ACTION statements of the appropriate specifications.

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3.0.4 This specification establishes limitations on changes in OPERATIONAL CONDITIONS or other specified applicability states when a Limiting Condition for Operation is not met. It precludes placing the unit in a different OPERATIONAL CONDITION or other specified applicability state when the following exist:

- a. The requirements of a Limiting Condition for Operation, in the OPERATIONAL CONDITION or other specified applicability state to be entered, are not met; and
- b. Continued noncompliance with these Limiting Condition for Operation requirements would result in the unit being required to be placed in an OPERATIONAL CONDITION, or other specified applicability state in which the Limiting Condition for Operation does not apply, to comply with the ACTION requirements.

Compliance with ACTION requirements that permit continued operation of the unit for an unlimited period of time in an OPERATIONAL CONDITION or other specified applicability state provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the OPERATIONAL CONDITION change. Therefore, in such cases, entry into an OPERATIONAL CONDITION or other specified applicability state may be made in accordance with the provisions of the ACTION requirements. The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before unit startup.

The provisions of Specification 3.0.4 shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements. In addition, the provisions of Specification 3.0.4 shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that result from a normal shutdown.

Exceptions to Specification 3.0.4 are stated in the individual Specifications. Exceptions may apply to all the ACTION requirements or to a specific ACTION requirement of a Specification.

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by Specification 4.0.3. Therefore, changing OPERATIONAL CONDITIONS or other specified applicability states while in an ACTION, either in compliance with Specification 3.0.4 or where an exemption to Specification 3.0.4 is stated, is not a violation of Surveillance Requirement 4.0.1 or Surveillance Requirement 4.0.4 for those Surveillances that do not have to be performed due to the associated inoperable equipment. However, Surveillance Requirements must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected Limiting Condition for Operation.

This specification incorporates the guidance provided in Generic Letter 87-09.

## APPLICABILITY

### BASES

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4.0.1 This specification provides that surveillance activities necessary to ensure the Limiting Conditions for Operation are met and will be performed during the OPERATIONAL CONDITIONS for which the Limiting Conditions for Operation are applicable. Provisions for additional surveillance activities to be performed without regard to the applicable OPERATIONAL CONDITIONS are provided in the individual Surveillance Requirements.

4.0.2 The provisions of this specification provide allowable tolerances for performing surveillance activities beyond those specified in the nominal surveillance interval. These tolerances are necessary to provide operational flexibility because of scheduling and performance considerations. The phrase "at least" associated with a surveillance frequency does not negate this allowable tolerance value and permits the performance of more frequent surveillance activities. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillance that are not performed during refueling outages.

The tolerance value is sufficiently restrictive to ensure that the reliability associated with the surveillance activity is not significantly degraded beyond that obtained from the nominal specified interval.

~~4.0.3 The provisions of the specification set forth the criteria for determination of compliance with the OPERABILITY requirements of the Limiting Conditions for Operation. Under this criteria, equipment, systems, or components are assumed to be OPERABLE if the associated surveillance activities have been satisfactorily performed within the specified time interval. Nothing in this provision is to be construed as defining equipment, systems, or components OPERABLE, when such items are found or known to be inoperable although still meeting the Surveillance Requirements.~~

~~4.0.4 This specification ensures that surveillance activities associated with a Limiting Condition for Operation have been performed within the specified time interval prior to entry into an applicable CONDITION. The intent of this provision is to ensure that surveillance activities have been satisfactorily demonstrated on a current basis as required to meet the OPERABILITY requirements of the Limiting Condition for Operation.~~

~~Under the terms of this specification, for example, during initial plant startup or following extended plant outage, the applicable surveillance activities must be performed within the stated surveillance interval prior to placing or returning the system or equipment into OPERABLE status. Exceptions to some surveillance activities have been provided for an individual specifications.~~

REPLACE WITH INSERT ATTACHED.



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4.0.3 This specification establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified time interval. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is less, applies from the point in time that it is discovered that the Surveillance has not been performed in accordance with Surveillance Requirement 4.0.2, and not at the time that the specified time interval was not met.

This delay period provides adequate time to complete Surveillances that have been missed. This delay period permits the completion of a Surveillance before complying with ACTION requirements or other remedial measures that might preclude completion of the Surveillance.

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements.

When a Surveillance with a time interval based upon specified unit conditions or operational situations, is discovered not to have been performed when specified, Surveillance Requirement 4.0.3 allows the full delay period of 24 hours to perform the Surveillance.

Specification 4.0.3 also provides a time for completion of Surveillances that become applicable as a consequence of OPERATIONAL CONDITION changes imposed by ACTION requirements.

Failure to comply with specified time intervals for Surveillance Requirements is expected to be an infrequent occurrence. Use of the delay period established by Surveillance Requirement 4.0.3 is a flexibility which is not intended to be used as an operational convenience to extend Surveillance intervals.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the completion times of the ACTION requirements for the applicable Limiting Condition for Operation conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the completion times of the ACTION requirements for the applicable Limiting Condition for Operation begin immediately upon the failure of the Surveillance.

Completion of the Surveillance within the delay period allowed by this Specification, or within the completion time of the ACTION requirements, restores compliance with Surveillance Requirement 4.0.1.

This specification incorporates the guidance provided in Generic Letter 87-09.



4.0.4 This specification establishes the requirement that all applicable Surveillance Requirements must be met before entry into an OPERATIONAL CONDITION or other applicability state.

This Specification ensures that system and component OPERABILITY requirements and variable limits are met before entry into OPERATIONAL CONDITIONS or other specified applicability states for which these systems and components ensure safe operation of the unit. This Specification applies to changes in OPERATIONAL CONDITIONS or other specified applicability states associated with unit shutdown as well as startup.

The provisions of Specification 4.0.4 shall not prevent entry into OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

The precise requirements for performance of Surveillance Requirements are specified such that exceptions to Specification 4.0.4 are not necessary. The specific time frames and conditions necessary for meeting the Surveillance Requirements are specified in the Surveillance Requirement. This allows performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into an OPERATIONAL CONDITION or other specified applicability state of the associated Limiting Condition for Operation prior to the performance or completion of a Surveillance. A Surveillance that could not be performed until after entering the Limiting Condition for Operation Applicability would have its time interval specified such that it is not "due" until the specified conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note as not required (to be met or performed) until a particular event, condition, or time has been reached.

This specification incorporates the guidance provided in Generic Letter 87-09.

ENCLOSURE 6

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1 AND 2  
NRC DOCKETS 50-325 AND 50-324  
OPERATING LICENSES DPR-71 AND DPR-62  
REQUEST FOR LICENSE AMENDMENTS  
APPLICABILITY AND SURVEILLANCE REQUIREMENTS

MARKED-UP TECHNICAL SPECIFICATION PAGES - UNIT 2

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY

LIMITING CONDITION FOR OPERATION

3.0.1 Limiting Conditions for Operation and ACTION requirements shall be applicable during the OPERATIONAL CONDITIONS or other states specified for each specification.

3.0.2 Adherence to the requirements of the Limiting Condition for Operation and associated ACTION within the specified time interval shall constitute compliance with the specification. In the event the Limiting Condition for Operation is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.

3.0.3 In the event a Limiting Condition for Operation and/or associated ACTION requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in at least HOT SHUTDOWN within 6 hours and in COLD SHUTDOWN within the following 30 hours unless corrective measures are completed that permit operation under the permissible ACTION statements for the specified time interval as measured from initial discovery or until the reactor is placed in an OPERATIONAL CONDITION in which the specification is not applicable. Exceptions to these requirements shall be stated in the individual specifications.

*When a Limiting Condition for Operation is not met,*

3.0.4 <sup>^</sup> Entry into an OPERATIONAL CONDITION or other specified applicability state shall not be made, ~~unless the conditions of the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION statements unless otherwise excepted.~~ This <sup>specifically</sup> provision shall not prevent <sup>changes in</sup> passage through OPERATIONAL CONDITIONS, <sup>or other specified applicability states that are</sup> required to comply with ACTION requirements.

3.0.5 When a system, subsystem, train, component, or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystems(s), train(s), component(s), and device(s) are OPERABLE, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, the unit shall be placed in at least HOT SHUTDOWN within 6 hours, and in at least COLD SHUTDOWN within the following 30 hours. This specification is not applicable in Conditions 4 or 5.

*Exceptions to this specification are stated in the individual specifications. These exceptions allow entry into OPERATIONAL CONDITIONS or other specified applicability states when the associated actions to be entered allow unit operation in the OPERATIONAL CONDITIONS or other specified applicability states only for a limited period of time.*

*except when the associated actions to be entered permit continued operation in the OPERATIONAL CONDITION or other specified applicability states for an unlimited period of time.*

*SEE TSI 8409*

APPLICABILITY

SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance Requirements shall be applicable during the OPERATIONAL CONDITIONS or other states specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval.

~~4.0.3 Performance of a Surveillance Requirement within the specified time interval shall constitute compliance with OPERABILITY requirements for a Limiting Condition for Operation and associated ACTION statements unless otherwise required by the specification. Surveillance requirements do not have to be performed on inoperable equipment.~~

REPLACE WITH INSERT ATTACHED

~~4.0.4 Entry into an OPERATIONAL CONDITION or other specified applicable state shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the applicable surveillance interval or as otherwise specified.~~

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

- a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g) (6) (i).

This provision shall not prevent entry into OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

Limiting Condition for Operations Surveillances have been met within the specified frequency.

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4.0.3 If it is discovered that a Surveillance Requirement was not performed within its specified time interval, then compliance with the requirement to declare the Limiting Condition for Operation not met may be delayed, from the time of the discovery, up to 24 hours or up to the period of the specified time interval, whichever is less. The delay period is permitted to allow performance of the Surveillance Requirement.

If the Surveillance Requirement is not performed within the delay period, the Limiting Condition for Operation must immediately be declared not met, and the applicable ACTION(S) must be entered.

When the Surveillance Requirement is performed within the delay period and the Surveillance Requirement is not met, the Limiting Condition for Operation must immediately be declared not met, and the applicable ACTION(S) must be entered.

Surveillance requirements do not have to be performed on inoperable equipment.

REACTIVITY CONTROL SYSTEMS

CONTROL ROD DRIVE COUPLING

LIMITING CONDITION FOR OPERATION

---

3.1.3.6 All control rods shall be coupled to their drive mechanisms.

APPLICABILITY: CONDITIONS 1, 2, and 5\*.

ACTION:

- a. In CONDITION 1 or 2 with one control rod not coupled to its associated drive mechanism, the provisions of Specification 3.0.4 are ~~not applicable and~~ operation may continue provided:
1. Within the preset power level of the RWM, the control rod is declared inoperable and fully inserted until recoupling can be attempted with THERMAL POWER above the preset power level of the RWM and the requirements of Specification 3.1.4.1.d are satisfied.
  2. Above the preset power level of the RWM, the control rod drive is inserted to accomplish recoupling. If recoupling is not accomplished on the first attempt, declare the control rod inoperable, fully insert the control rod, and electrically disarm the directional control valves.
  3. The requirements of Specification 3.1.3.1 are satisfied.
- b. In CONDITION 5\*, with a withdrawn control rod not coupled to its associated drive mechanism, insert the control rod to accomplish recoupling. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

---

4.1.3.6 The coupling integrity of a control rod shall be demonstrated by withdrawing the control rod to the fully withdrawn position and verifying that the rod does not go to the overtravel position:

\*At least each withdrawn control rod. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.



## REACTIVITY CONTROL SYSTEMS

### 3/4 1.4 CONTROL ROD PROGRAM CONTROLS

#### ROD WORTH MINIMIZER

##### LIMITING CONDITION FOR OPERATION

3.1.4.1 The Rod Worth Minimizer (RWM) shall be OPERABLE when THERMAL POWER is less than 10% of RATED THERMAL POWER.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2\*.

##### ACTION:

- a. With the RWM inoperable after the first 12 control rods have been fully withdrawn on a startup, operation may continue provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- b. With the RWM inoperable before the first 12 control rods are withdrawn on a startup, one startup per calendar year may be performed provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- c. With RWM inoperable on a shutdown, shutdown may continue provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- d. With RWM operable but individual control rod(s) declared inoperable, operation and control rod movement below the preset power level of the RWM may continue provided:
  1. No more than three (3) control rods are declared inoperable in any one BPWS group, and.
  2. The inoperable control rod(s) is bypassed on the RWM and control rod movement of the bypassed rod(s) is verified by a second licensed operator or qualified member of the plant technical staff.

~~e. With RWM inoperable, the provisions of Specification 3.0.4 are not applicable.~~

\* Entry into OPERATIONAL CONDITION 2 and withdrawal of selected control rods is permitted for the purpose of determining the OPERABILITY of the RWM prior to withdrawal of control rods for the purpose of bringing the reactor to criticality.

INSTRUMENTATION

3/4.3.5 MONITORING INSTRUMENTATION

SEISMIC MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

---

3.3.5.1 The seismic monitoring instrumentation shown in Table 3.3.5.1-1 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one or more seismic monitoring instruments inoperable for more than 31 days, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission, within the next 14 days, outlining the cause of the malfunction and the plans for restoring the instruments to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

---

4.3.5.1.1 Each of the above required seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3.5.1-1.

4.3.5.1.2 Each of the above required seismic monitoring instruments actuated during a seismic event shall be restored to OPERABLE status within 24 hours and a CHANNEL CALIBRATION performed within 5 days following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. In lieu of any other report required by Specification 6.9.1, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 14 days describing the magnitude, frequency spectrum, and resultant effect upon facility features important to safety.

INSTRUMENTATION

ACCIDENT MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

---

3.3.5.3 The accident monitoring instrumentation channels shown in Table 3.3.5.3-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.5.3-1.

ACTION:

a. With one or more accident monitoring instrumentation channels inoperable, take the ACTION required by Table 3.3.5.3-1.

b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

---

4.3.5.3 Each of the above required accident monitoring instrumentation channels shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.5.3-1.

TABLE 3.3.5.3-1

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. Reactor Vessel Pressure (c)	2	1	1, 2	82
2. Reactor Vessel Water Level (c)	2	1	1, 2	82
3. Suppression Chamber Water Level (c)	2	1	1, 2	82
4. Suppression Chamber Water Temperature (c)	2	1	1, 2	82 (b)
5. Suppression Chamber Atmosphere Temperature (c)	2	1	1, 2	82 (b)
6. Drywell Pressure (c)	2	1	1, 2	82
7. Drywell Temperature (c)	2	1	1, 2	82 (b)
8. Drywell Radiation	2	2	1, 2, 3	81
9. Drywell Oxygen Concentration (c)	2	1	1, 2	82
10. Drywell Hydrogen Concentration Analyzer and Monitor (c)	2	1	1, 2	82
11. Drywell Area Radiation Monitors	2	2	1, 2	81
12. Safety/Relief Valve Position Indication (c) a. Primary - Sonic b. Secondary - Temp.	2/valve	1/valve	1, 2	82
13. Turbine Building Ventilation Monitor (a)	1	1	1, 2, 3	81
14. Off-gas Stack Ventilation Monitor (a)	1	1	1, 2, 3	81

(a) High range noble gas monitors.

(b) See also specification 3.6.2.1 for ACTION requirements for the Suppression Pool Temperature Monitoring System Instrumentation.

(c) The provisions of Specification 3.0.4 are not applicable.

INSTRUMENTATION

CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

---

3.3.5.5 The Control Room Emergency Ventilation System instrumentation shown in Table 3.3.5.5-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.5 5-1.

ACTION:

- a. With one or more detectors inoperable, take the ACTION required by Table 3.3.5.5-1.
- b. ~~The provisions of Specification 3.0.4 are not applicable.~~

SURVEILLANCE REQUIREMENTS

---

4.3.5.5 Each of the above required control room emergency ventilation instruments shall be demonstrated OPERABLE by performance of the testing at the frequency required by Table 4.3.5.5-1.

INSTRUMENTATION

CHLORIDE INTRUSION MONITOR

LIMITING CONDITION FOR OPERATION

---

3.3.5.6 The chloride intrusion monitor channels shown in Table 3.3.5.6-1 shall be OPERABLE with alarm setpoints set consistent with the values shown in the Trip Setpoint columns of Table 3.3.5.6-2.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION:

- a. With one or two of the functional units shown in Table 3.3.5.6-1 inoperable, operation may continue, and the provisions of Specification 3.0.4 are not applicable.
- b. With three of the functional units shown in Table 3.3.5.6-1 inoperable, sample at least one parameter monitored by the inoperable functional units at least once per 4 hours. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.
- c. With none of the functional units shown in Table 3.3.5.6-1 OPERABLE, be in at least HOT SHUTDOWN within 12 hours.

SURVEILLANCE REQUIREMENTS

---

4.3.5.6 The chloride intrusion monitor channels shall be demonstrated OPERABLE by performing the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.5.6-1.



INSTRUMENTATION

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

---

3.3.5.8 The radioactive liquid effluent monitoring instrumentation channels shown in Table 3.3.5.8-1 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.1.1 are not exceeded. The alarm/trip setpoints shall be determined in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY: As shown in Table 3.3.5.8-1.

ACTION:

- a. With a radioactive liquid effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, without delay suspend the release of radioactive liquid effluents monitored by the affected channel, declare the channel inoperable, or change the setpoint so it is acceptably conservative.
- b. With less than one radioactive liquid effluent monitoring instrumentation channel in each release pathway OPERABLE, take the ACTION shown in Table 3.3.5.8-1. Return the instruments to OPERABLE status within 30 days or, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

---

4.3.5.8 Each radioactive liquid effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3.5.8-1.

NOTE: See Bases 3/4.3.5.8.

INSTRUMENTATION

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

TSI 93-004-00

LIMITING CONDITION FOR OPERATION

3.3.5.9 The radioactive gaseous effluent monitoring instrumentation channels shown in Table 3.3.5.9-1 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.1 are not exceeded. The setpoints shall be determined in accordance with the methodology as described in the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY: As shown in Table 3.3.5.9-1.

ACTION:

- a. With a radioactive gaseous effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, without delay suspend the release of radioactive gaseous effluents monitored by the affected channel, or declare the channel inoperable, or change the setpoint so it is acceptably conservative.
- b. With less than one radioactive gaseous effluent monitoring instrumentation channel OPERABLE, take the ACTION shown in Table 3.3.5.9-1. Return the instruments to OPERABLE status within 30 days or, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- c. The provisions of Specifications ~~3.0.3~~ and ~~3.0.4~~ are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.5.9 Each radioactive gaseous effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST at the frequencies shown in Table 4.3.5.9-1.

NOTE: See Bases 3/4.3.5.9.

## INSTRUMENTATION

### END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

3.3.6.2 The end-of-cycle recirculation pump trip (EOC-RPT) system instrumentation channels shown in Table 3.3.6.2-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.6.2-2 and with the END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM RESPONSE TIME as shown in Table 3.3.6.2-3.

APPLICABILITY: OPERATIONAL CONDITION 1, when THERMAL POWER is greater than or equal to 30% of RATED THERMAL POWER and the MCPR limits obtained from the COLR for use with Specification 3.2.2.1 require EOC-RPT.

#### ACTION:

- a. With an end-of-cycle recirculation pump trip system instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values Column of Table 3.3.6.2-2, declare the channel inoperable until the channel is restored to OPERABLE status with the channel setpoint adjusted consistent with the Trip Setpoint value.
- b. With the number of OPERABLE channels one less than required by the Minimum OPERABLE Channels per Trip System requirement for one or both trip systems, place the inoperable channel(s) in the tripped condition within 12 hours.
- c. With the number of OPERABLE channels two or more less than required by the Minimum OPERABLE Channels per Trip System requirement for one trip system and:
  1. If the operable channels consist of one turbine control valve channel and one turbine stop valve channel, place both inoperable channels in the tripped condition within 12 hours.
  2. If the inoperable channels include two turbine control valve channels or two turbine stop valve channels, declare the trip system operable.
- d. With one trip system inoperable, restore the inoperable trip system to OPERABLE status within 72 hours or take the ACTION required by Specification 3.2.2.1.
- e. With both trip systems inoperable, restore at least one trip system to OPERABLE status within one hour or take the ACTION required by Specification 3.2.2.1.

\* The provisions of Specification 3.0.4 are not applicable.

PLANT SYSTEMS

3/4.7.6 SEALED SOURCE CONTAMINATION

LIMITING CONDITION FOR OPERATION

---

3.7.6 Each sealed source containing radioactive material in excess of 100 microcuries of beta and/or gamma-emitting material or 5 microcuries of alpha-emitting material shall be free of greater than or equal to 0.005 microcuries of removable contamination.

APPLICABILITY: At all times.

ACTION:

Each sealed source with removable contamination in excess of the above limit shall be immediately withdrawn from use and:

- a. Either decontaminated and repaired, or
- b. Disposed of in accordance with Commission Regulations.

The Provisions of Specifications 3.0.3 (and 3.0.4) are not applicable.

SURVEILLANCE REQUIREMENTS

---

4.7.6.1 Test Requirements - Each sealed source shall be tested for leakage and/or contamination by:

- a. The licensee, or
- b. Other persons specifically authorized by the Commission or an Agreement State.

The test method shall have a detection sensitivity of at least 0.005 microcuries per test sample.

4.7.6.2 Test Frequencies - Each category of sealed sources (excluding start-up sources and fission detectors previously subjected to core flux) shall be tested at the frequency described below.

- a. Sources in use - At least once per six months for all sealed sources containing radioactive material:

RADIOACTIVE EFFLUENTS

DOSE - LIQUID EFFLUENTS

LIMITING CONDITION FOR OPERATION

---

3.11.1.2 The dose or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released to UNRESTRICTED AREAS (see Figure 5.1.3-1) shall be limited:

- a. During any calendar quarter to less than or equal to 3 mrem to the total body and to less than or equal to 10 mrem to any organ, and
- b. During any calendar year to less than or equal to 6 mrem to the total body and to less than or equal to 20 mrem to any organ.

APPLICABILITY: At all times.

ACTION:

- a. With the calculated doses from the release of radioactive materials in liquid effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions that have been taken to reduce the releases and the proposed corrective action to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

---

4.11.1.2 Dose Calculations - Cumulative dose contributions from liquid effluents for the current calendar quarter and the current calendar year shall be determined in accordance with the ODCM at least once per 31 days.

---

NOTE: See Bases 3/4.11.1.2

## RADIOACTIVE EFFLUENTS

### LIQUID RADWASTE TREATMENT SYSTEM

#### LIMITING CONDITION FOR OPERATION

---

3.11.1.3 The liquid radwaste treatment system shall be used to reduce the radioactive materials in liquid wastes prior to their discharge when the projected doses due to the liquid effluent from the site to UNRESTRICTED AREAS (see Figure 5.1.3-1) would exceed 0.12 mrem to the total body or 0.4 mrem to any organ in a 31-day period.

APPLICABILITY: At all times.

#### ACTION:

- a. With radioactive liquid waste being discharged without treatment and in excess of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Explanation of why liquid radwaste was being discharged without treatment, identification of any inoperable equipment or sub-system, and reason for the inoperability.
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
  3. Summary of description of action(s) taken to prevent a recurrence.
- b. The provisions of Specifications 3.0.3 and 3.8.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.11.1.3 Doses due to liquid releases from the site to UNRESTRICTED AREAS shall be projected at least once per 31 days in accordance with the ODCM.

---

NOTE: See Bases 3/4.11.1.3



## RADIOACTIVE EFFLUENTS

### LIQUID HOLDUP TANKS

Appropriate alternatives to the ACTIONS and Surveillance Requirements below can be accepted if they provide reasonable assurance that in the event of an uncontrolled release of the tanks' content, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

### LIMITING CONDITION FOR OPERATION

---

3.11.1.4 The quantity of radioactive material suspended in solution in each of the following unprotected outdoor tanks shall be limited to less than or equal to the activity indicated below, excluding tritium and dissolved or entrained gases.

<u>OUTSIDE TANK</u>	<u>CURIE LIMIT</u>
a. Condensate Storage Tank	10 Ci
b. Outside Temporary Tank	10 Ci

APPLICABILITY: At all times.

#### ACTION:

- a. With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, without delay suspend all addition of radioactive material to the tank, within 48 hours reduce the tank's contents to within the limit, and describe the events leading to this condition in the next Semiannual Radioactive Effluent Release Report.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

### SURVEILLANCE REQUIREMENTS

---

4.11.1.4 The quantity of radioactive material contained in each of the tanks listed shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

---

NOTE: See Bases 3.4.11.1.4

## RADIOACTIVE EFFLUENTS

### DOSE - NOBLE GASES

#### LIMITING CONDITION FOR OPERATION

---

---

3.11.2.2 The air dose due to noble gases released in gaseous effluents from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation;
- b. During any calendar year: Less than or equal to 20 mrad for gamma radiation and less than or equal to 40 mrad for beta radiation.

APPLICABILITY: At all times.

#### ACTIONS:

- a. With the calculated air dose from radioactive noble gases in gaseous effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions to be taken to reduce the releases, and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

---

4.11.2.2 Dose Calculations - Cumulative dose contributions for noble gases for the current calendar quarter and current calendar year shall be determined in accordance with the ODCM at least once per 31 days.

---

NOTE: See Bases 3/4.11.2.2

RADIOACTIVE EFFLUENTS

DOSE - IODINE-131, IODINE-133, TRITIUM, AND RADIONUCLIDES IN PARTICULATE FORM

LIMITING CONDITION FOR OPERATION

---

3.11.2.3 The dose to a MEMBER OF THE PUBLIC from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 15 mrems to any organ; and
- b. During any calendar year: Less than or equal to 30 mrems to any organ.
- c. Less than 0.1% of the limits of 3.11.2.3(a) and (b) as a result of burning contaminated oil.

APPLICABILITY: At all times.

ACTION:

- a. With the calculated dose from the release of iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit and defines the corrective actions that have been taken to reduce the releases and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

---

4.11.2.3 Dose Calculations - Cumulative dose contributions for the current calendar quarter and current calendar year for iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days shall be determined in accordance with the ODCM at least once per 31 days.

---

NOTE: See Bases 3/4.11.2.3

RADIOACTIVE EFFLUENTS

GASEOUS RADWASTE TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

---

3.11.2.4 The GASEOUS RADWASTE TREATMENT SYSTEM shall be in operation.

APPLICABILITY: Whenever the main condenser air ejector (evacuation) system is in operation.

ACTION:

- a. With gaseous radwaste from the main condenser air ejector system being discharged without treatment for more than 7 days, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Identification of the inoperable equipment or subsystems and the reason for inoperability,
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
  3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specifications ~~3.0.3~~ and ~~3.0.4~~ are not applicable.

SURVEILLANCE REQUIREMENTS

---

4.11.2.4 The readings of the relevant instruments shall be checked at least once per 12 hours when the main condenser air ejector is in use to ensure that the GASEOUS RADWASTE TREATMENT SYSTEM is functioning.

---

NOTE: See Bases 3/4.11.2.4

## RADIOACTIVE EFFLUENTS

### VENTILATION EXHAUST TREATMENT SYSTEM

#### LIMITING CONDITION FOR OPERATION

---

3.11.2.5 The VENTILATION EXHAUST TREATMENT SYSTEM shall be used to reduce radioactive materials in gaseous waste prior to their discharge when the projected doses due to gaseous effluent releases, from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1), would exceed 0.6 mrem to any organ over 31 days.

APPLICABILITY: At all times other than when the VENTILATION EXHAUST TREATMENT SYSTEM is undergoing routine maintenance.

#### ACTION:

- a. With gaseous waste being discharged without treatment and in excess of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Identification of any inoperable equipment or subsystems and the reason for the inoperability;
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status; and
  3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.11.2.5 Doses due to gaseous releases from the site shall be projected at least once per 31 days, in accordance with the ODCM, when the VENTILATION EXHAUST TREATMENT SYSTEM is not in use.

---

NOTE: See Bases 3/4.11.2.5

RADIOACTIVE EFFLUENTS

DRYWELL VENTING OR PURGING

LIMITING CONDITION FOR OPERATION

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3.11.2.8 The drywell shall be purged to the environment at a rate in conformance with Specification 3.11.2.1.

APPLICABILITY: Whenever the drywell is vented or purged.

ACTION:

- a. With the requirements of the above specification not satisfied, suspend all VENTING or PURGING of the drywell.
- b. The provisions of Specifications ~~3.0.3~~ and ~~3.0.4~~ are not applicable.

SURVEILLANCE REQUIREMENTS

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4.11.2.8 A sample analysis, as defined in Table 4.11.2-1, shall be performed prior to each drywell PURGE.

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NOTE: See Bases 3/4.11.2.8



## RADIOACTIVE EFFLUENTS

### 3/4.11.3 SOLID RADIOACTIVE WASTE

#### LIMITING CONDITION FOR OPERATION

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3.11.3 The solid radioactive system shall be used in accordance with a PROCESS CONTROL PROGRAM to process wet radioactive wastes to meet shipping and burial ground requirements.

APPLICABILITY: At all times.

#### ACTION:

- a. With the provisions of the PROCESS CONTROL PROGRAM not satisfied, suspend shipments of defectively processed or defectively packaged solid radioactive wastes from the site.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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---

4.11.3 The PROCESS CONTROL PROGRAM shall be used to verify the SOLIDIFICATION of at least one representative test specimen from at least every tenth batch of each type of wet radioactive waste (e.g., filter sludges, spent resins, evaporator bottoms, and sodium sulfate solutions).

- a. If any test specimen fails to verify SOLIDIFICATION, the SOLIDIFICATION of the batch under test shall be suspended until such time as additional test specimens can be obtained, alternative SOLIDIFICATION parameters can be determined in accordance with the PROCESS CONTROL PROGRAM, and a subsequent test verifies SOLIDIFICATION. SOLIDIFICATION of the batch may then be resumed using the alternative SOLIDIFICATION parameters determined by the PROCESS CONTROL PROGRAM.
- b. If the initial test specimen from a batch of waste fails to verify SOLIDIFICATION, the PROCESS CONTROL PROGRAM shall provide for the collection of testing of representative test specimens from each consecutive batch of the same type of wet waste until at least 3 consecutive initial test specimens demonstrate SOLIDIFICATION. The PROCESS CONTROL PROGRAM shall be modified as required, as provided in Specification 6.14, to assure SOLIDIFICATION of subsequent batches of waste.

---

NOTE: See Bases 3/4.11.3

RADIOACTIVE EFFLUENTS

3/4.11.4 TOTAL DOSE (40 CFR PART 190)

LIMITING CONDITION FOR OPERATION

---

3.11.4 The annual (calendar year) dose or dose commitment to any MEMBER OF THE PUBLIC, due to releases of radioactivity and radiation from uranium fuel cycle sources shall be limited to less than or equal to 25 mrems to the total body or any organ (except the thyroid, which shall be limited to less than or equal to 75 mrems).

APPLICABILITY: At all times.

ACTION:

- a. With the calculated doses from the release of radioactive materials in liquid or gaseous effluents exceeding twice the limits of Specifications 3.11.1.2.a, 3.11.1.2.b, 3.11.2.2.a, 3.11.2.2.b, 3.11.2.3.a, or 3.11.2.3.b, calculations should be made which, in addition to doses due to effluents, include direct radiation contributions from the reactor units and from outside storage tanks to determine whether the above limits of Specification 3.11.4 have been exceeded. If such is the case, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days pursuant to Specification 6.9.2, a Special Report that defines the corrective action to be taken to reduce subsequent releases to prevent recurrence of exceeding the above limits and includes the schedule for achieving conformance with the above limits. This Special Report, as defined in 10 CFR Part 20.405c, shall include an analysis that estimates the radiation exposure (dose) to a MEMBER OF THE PUBLIC from uranium fuel cycle sources, including all effluent pathways and direct radiation, for the calendar year that includes the release(s) covered by this report. It shall also describe levels of radiation and concentrations of radioactive material involved and the cause of the exposure levels or concentrations. If the estimated dose(s) exceeds the above limits; and if the release condition resulting in violation of 40 CFR Part 190 has not already been corrected, the Special Report shall include a request for a variance in accordance with the provisions of 40 CFR Part 190. Submittal of the report is considered a timely request, and a variance is granted until Staff action on the request is complete.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

RADIOLOGICAL ENVIRONMENTAL MONITORING

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

environmental monitoring program within 30 days. The specific locations from which samples were unavailable may then be deleted from the monitoring program and ODCM. In lieu of a Licensee Event Report and pursuant to Specification 6.9.1.8, identify the cause of unavailability of samples; and identify the new location(s) for obtaining replacement samples in the next Semiannual Radioactive Effluent Release Report, and also include in the report a revised figure(s) and table for the ODCM reflecting the new location(s).

- d. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.12.1 The radiological environmental monitoring samples shall be collected pursuant to Table 3.12.1-1 from the specific locations given in the table and figure(s) in the ODCM and shall be analyzed pursuant to the requirements of Table 3.12.1-1 and the detection capabilities required by Table 4.12.1-1.

---

NOTE: See Bases 3/4.12.1

TABLE 3.12.1-1 (Continued)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

TABLE NOTATION

- (e) Gamma isotopic analysis means the identification and quantification of gamma-emitting radionuclides that may be attributable to the effluents from the facility.
- (f) The "upstream" sample shall be taken at a distance beyond significant influence of the discharge. The "downstream" sample shall be taken in an area beyond but near the mixing zone. "Upstream" samples in an estuary must be taken far enough upstream to be beyond the plant influence. Salt water shall be sampled only when the receiving water is utilized for recreational activities.
- (g) A composite sample is one in which the quantity (aliquot) of liquid sampled is proportional to the quantity of flowing liquid and in which the method of sampling employed results in a specimen that is representative of the liquid flow. Composite samples shall be collected with equipment that is capable of collecting an aliquot at time intervals that are short (e.g., once per 6 hours) relative to compositing period (e.g., monthly) in order to assure obtaining a representative sample.
- (h) When less than three (3) milking animal locations are available for testing within an 8-km distance, sampling of broadleaf vegetation shall be performed as indicated in Table 3.12.1-1, 4.c, in lieu of with 3.0.3, 3.0.4, and 6.9.14.b are not applicable.

milk sampling.

## RADIOLOGICAL ENVIRONMENTAL MONITORING

### 3/4.12.2 LAND USE CENSUS

#### LIMITING CONDITION FOR OPERATION

---

3.12.2 A land use census shall be conducted and shall identify within a distance of 8 km (5 miles) the location in each of the 16 meteorological sectors of the nearest milk animal, the nearest resident, and the nearest garden of greater than 50 m<sup>2</sup> (500 ft<sup>2</sup>) producing broadleaf vegetation. (For elevated releases as defined in Regulatory Guide 1.111, Revision 1, July 1977, the land use census shall also identify within a distance of 5 km (3 miles) the location in each of the 16 meteorological sectors of all milk animals and all gardens of greater than 50 m<sup>2</sup> producing broadleaf vegetation.)

Broadleaf vegetable sampling of at least 3 different kinds of vegetation may be performed at the SITE BOUNDARY in each of 2 different direction sectors with the highest D/Qs in lieu of the garden census. Specifications for broadleaf vegetation sampling in Table 3.12.1-1(4c) shall be followed, including analysis of control samples.

APPLICABILITY: At all times.

#### ACTION:

- a. With a land use census identifying a location(s) that yields a calculated dose or dose commitment greater than the values currently being calculated in Specification 4.11.2.3, in lieu of a Licensee Event Report, identify the new location(s) in the next Semiannual Radioactive Effluent Release Report, pursuant to Specification 6.9.1.8.
- b. With a land use census identifying a location(s) that yields a calculated dose or dose commitment (via the same exposure pathway) 20 percent greater than at a location from which samples are currently being obtained in accordance with Specification 3.12.1, add the new location(s) to the radiological environmental monitoring program within 30 days. The sampling location(s), excluding the central station location, having the lowest calculated dose or dose commitment(s) (via this same exposure pathway) may be deleted from this monitoring program after October 31 of the year in which this land use census was conducted. In lieu of a Licensee Event Report and pursuant to Specification 6.9.1.8, identify the new location(s) in the next Semiannual Effluent Release Report; and also include in the report a revised figure(s) and table for the ODCM reflecting the new location(s).
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.



RADIOLOGICAL ENVIRONMENTAL MONITORING

3/4.12.3 INTERLABORATORY COMPARISON PROGRAM

LIMITING CONDITION FOR OPERATION

3.12.3 Analyses shall be performed on radioactive materials supplied as part of an Interlaboratory Comparison Program that has been approved by the Commission.

APPLICABILITY: At all times.

ACTION:

- a. With analyses not being performed as required above, report the corrective actions taken to prevent a recurrence to the Commission in the Annual Radiological Environmental Operating Report pursuant to Specification 6.9.1.7.
- b. The provisions of Specifications ~~3.0.3~~ and ~~3.0.4~~ are not applicable.

SURVEILLANCE REQUIREMENTS

4.12.3 The Interlaboratory Comparison Program shall be described in the ODCM. A summary of the results, obtained as part of the above required Interlaboratory Comparison Program, shall be included in the Annual Radiological Environmental Operating Report pursuant to Specification 6.9.1.7.

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NOTE: See Bases 3/4.12.3



### 3/4.0 APPLICABILITY

#### BASES

The specifications of this section provide the general requirements applicable to each of the Limiting Conditions for Operation and Surveillance Requirements within section 3/4.

3.0.1 This specification states the applicability of each specification in terms of defined OPERATIONAL CONDITION and is provided to delineate specifically when each specification is applicable.

3.0.2 This specification defines those conditions necessary to constitute compliance with the terms of an individual Limiting Condition for Operation and associated ACTION requirement.

3.0.3 This specification delineates the ACTION to be taken for circumstances not directly provided for in the ACTION statements and whose occurrence would violate the intent of specification. For example, Specification 3.5.1 calls for the HPCI to be OPERABLE and specifies explicit requirements if it become inoperable. Under the terms of Specification 3.0.3, if the required additional systems are not OPERABLE, the facility is to be placed in HOT SHUTDOWN within the next 6 hours and be in COLD SHUTDOWN within the following 30 hours. The unit shall be brought to the required OPERATIONAL CONDITION within the required times by promptly initiating and carrying out an orderly shutdown. It is intended that this guidance also apply whenever an ACTION statement requires a unit to be in START-UP within 2 hours or in HOT SHUTDOWN within 6 hours.

REPLACE WITH INSERT ATTACHED  
3.0.4 This specification provides that entry into an OPERABLE CONDITION must be made with (a) the full complement of required systems, equipment, or components OPERABLE, and (b) all other parameters as specified in the Limiting Conditions for Operation being met without regard for allowable deviations and out-of-service provisions contained in the ACTION statements.

The intent of this provision is to insure that facility operation is not initiated with either required equipment or systems inoperable or other limits being exceeded.

Exceptions to this provision have been provided for a limited number of specifications when start-up with inoperable equipment would not affect plant safety. These exceptions are stated in the ACTION statements of the appropriate specifications.

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3.0.4 This specification establishes limitations on changes in OPERATIONAL CONDITIONS or other specified applicability states when a Limiting Condition for Operation is not met. It precludes placing the unit in a different OPERATIONAL CONDITION or other specified applicability state when the following exist:

- a. The requirements of a Limiting Condition for Operation, in the OPERATIONAL CONDITION or other specified applicability state to be entered, are not met; and
- b. Continued noncompliance with these Limiting Condition for Operation requirements would result in the unit being required to be placed in an OPERATIONAL CONDITION, or other specified applicability state in which the Limiting Condition for Operation does not apply, to comply with the ACTION requirements.

Compliance with ACTION requirements that permit continued operation of the unit for an unlimited period of time in an OPERATIONAL CONDITION or other specified applicability state provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the OPERATIONAL CONDITION change. Therefore, in such cases, entry into an OPERATIONAL CONDITION or other specified applicability state may be made in accordance with the provisions of the ACTION requirements. The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before unit startup.

The provisions of Specification 3.0.4 shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements. In addition, the provisions of Specification 3.0.4 shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that result from a normal shutdown.

Exceptions to Specification 3.0.4 are stated in the individual Specifications. Exceptions may apply to all the ACTION requirements or to a specific ACTION requirement of a Specification.

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by Specification 4.0.3. Therefore, changing OPERATIONAL CONDITIONS or other specified applicability states while in an ACTION, either in compliance with Specification 3.0.4 or where an exemption to Specification 3.0.4 is stated, is not a violation of Surveillance Requirement 4.0.1 or Surveillance Requirement 4.0.4 for those Surveillances that do not have to be performed due to the associated inoperable equipment. However, Surveillance Requirements must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected Limiting Condition for Operation.

This specification incorporates the guidance provided in Generic Letter 87-09.

APPLICABILITY

BASES

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4.0.1 This specification provides that surveillance activities necessary to ensure the Limiting Conditions for Operation are met and will be performed during the OPERATIONAL CONDITIONS for which the Limiting Conditions for Operation are applicable. Provisions for additional surveillance activities to be performed without regard to the applicable OPERATIONAL CONDITIONS are provided in the individual Surveillance Requirements.

4.0.2 The provisions of this specification provide allowable tolerances for performing surveillance activities beyond those specified in the nominal surveillance interval. These tolerances are necessary to provide operational flexibility because of scheduling and performance considerations. The phrase "at least" associated with a surveillance frequency does not negate this allowable tolerance value and permits the performance of more frequent surveillance activities. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillance that are not performed during refueling outages.

The tolerance value is sufficiently restrictive to ensure that the reliability associated with the surveillance activity is not significantly degraded beyond that obtained from the nominal specified interval.

~~4.0.3 The provisions of the specification set forth the criteria for determination of compliance with the OPERABILITY requirements of the Limiting Conditions of Operation. Under this criteria, equipment, systems, or components are assumed to be OPERABLE if the associated surveillance activities have been satisfactorily performed within the specified time interval. Nothing in this provision is to be construed as defining equipment, systems, or components OPERABLE, when such items are found or known to be inoperable although still meeting the Surveillance Requirements.~~

~~4.0.4 This specification ensures that surveillance activities associated with a Limiting Condition for Operation have been performed within the specified time interval prior to entry into an applicable CONDITION. The intent of this provision is to ensure that surveillance activities have been satisfactorily demonstrated on a percent basis as required to meet the OPERABILITY requirements of the Limiting Condition for Operation.~~

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4.0.3 This specification establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified time interval. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is less, applies from the point in time that it is discovered that the Surveillance has not been performed in accordance with Surveillance Requirement 4.0.2, and not at the time that the specified time interval was not met.

This delay period provides adequate time to complete Surveillances that have been missed. This delay period permits the completion of a Surveillance before complying with ACTION requirements or other remedial measures that might preclude completion of the Surveillance.

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements.

When a Surveillance with a time interval based upon specified unit conditions or operational situations, is discovered not to have been performed when specified, Surveillance Requirement 4.0.3 allows the full delay period of 24 hours to perform the Surveillance.

Specification 4.0.3 also provides a time for completion of Surveillances that become applicable as a consequence of OPERATIONAL CONDITION changes imposed by ACTION requirements.

Failure to comply with specified time intervals for Surveillance Requirements is expected to be an infrequent occurrence. Use of the delay period established by Surveillance Requirement 4.0.3 is a flexibility which is not intended to be used as an operational convenience to extend Surveillance intervals.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the completion times of the ACTION requirements for the applicable Limiting Condition for Operation conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the completion times of the ACTION requirements for the applicable Limiting Condition for Operation begin immediately upon the failure of the Surveillance.

Completion of the Surveillance within the delay period allowed by this Specification, or within the completion time of the ACTION requirements, restores compliance with Surveillance Requirement 4.0.1.

This specification incorporates the guidance provided in Generic Letter 87-09.

4.0.4 This specification establishes the requirement that all applicable Surveillance Requirements must be met before entry into an OPERATIONAL CONDITION or other applicability state.

This Specification ensures that system and component OPERABILITY requirements and variable limits are met before entry into OPERATIONAL CONDITIONS or other specified applicability states for which these systems and components ensure safe operation of the unit. This Specification applies to changes in OPERATIONAL CONDITIONS or other specified applicability states associated with unit shutdown as well as startup.

The provisions of Specification 4.0.4 shall not prevent entry into OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

The precise requirements for performance of Surveillance Requirements are specified such that exceptions to Specification 4.0.4 are not necessary. The specific time frames and conditions necessary for meeting the Surveillance Requirements are specified in the Surveillance Requirement. This allows performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into an OPERATIONAL CONDITION or other specified applicability state of the associated Limiting Condition for Operation prior to the performance or completion of a Surveillance. A Surveillance that could not be performed until after entering the Limiting Condition for Operation Applicability would have its time interval specified such that it is not "due" until the specified conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note as not required (to be met or performed) until a particular event, condition, or time has been reached.

This specification incorporates the guidance provided in Generic Letter 87-09.



## APPLICABILITY

### BASES

Under the terms of this specification, for example, during initial plant start-up or following extended plant outage, the applicable surveillance activities must be performed within the stated surveillance interval prior to placing or returning the system or equipment into OPERABLE status. Exceptions to some surveillance activities have been provided for in individual specifications.

4.0.5 This specification ensures that inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves will be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50, Section 50.55a. Relief from any of the above requirements has been provided in writing by the Commission and is not a part of these technical specifications.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout these Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. For example, the requirements of Specification 4.0.4 to perform surveillance activities prior to entry into an OPERATIONAL MODE or other specified applicability condition takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows pumps to be tested up to one week after return to normal operation. And, for example, the Technical Specification definition of OPERABLE does not grant a grace period before a device that is not capable of performing its specified function is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

This specification includes a statement that the Inservice Inspection Program for pipe covered by the scope of GL 88-01 will be in conformance with the staff positions on schedule, methods and personnel, and sample expansion included in GL 88-01. This requirement may be removed from the technical specifications in the future in line with the Technical Specification Improvement programs.



ENCLOSURE 7

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1 AND 2  
NRC DOCKETS 50-325 AND 50-324  
OPERATING LICENSES DPR-71 AND DPR-62  
REQUEST FOR LICENSE AMENDMENTS  
APPLICABILITY AND SURVEILLANCE REQUIREMENTS

TYPED TECHNICAL SPECIFICATION PAGES - UNIT 1

## 3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

### 3/4.0 APPLICABILITY

#### LIMITING CONDITION FOR OPERATION

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3.0.1 Limiting Conditions for Operation and ACTION requirements shall be applicable during the OPERATIONAL CONDITIONS or other states specified for each specification.

3.0.2 Adherence to the requirements of the Limiting Condition for Operation and associated ACTION within the specified time interval shall constitute compliance with the specification. In the event the Limiting Condition for Operation is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.

3.0.3 In the event a Limiting Condition for Operation and/or associated ACTION requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in at least HOT SHUTDOWN within 6 hours and in COLD SHUTDOWN within the following 30 hours unless corrective measures are completed that permit operation under the permissible ACTION statements for the specified time interval as measured from initial discovery or until the reactor is placed in an OPERATIONAL CONDITION in which the specification is not applicable. Exceptions to these requirements shall be stated in the individual specifications.

3.0.4 When a Limiting Condition for Operation is not met, entry into an OPERATIONAL CONDITION or other specified applicability state shall not be made except when the associated actions to be entered permit continued operation in the OPERATIONAL CONDITION or other specified applicability state for an unlimited period of time. This specification shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

Exceptions to this specification are stated in the individual specifications. These exceptions allow entry into OPERATIONAL CONDITIONS or other specified applicability states when the associated actions to be entered allow unit operation in the OPERATIONAL CONDITIONS or other specified applicability states only for a limited period of time.

3.0.5 When a system, subsystem, train, component, or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystems(s), train(s), component(s), and device(s) are OPERABLE, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, the unit shall be placed in at least HOT SHUTDOWN within 6 hours, and in at least COLD SHUTDOWN within the following 30 hours. This specification is not applicable in Conditions 4 or 5.

## APPLICABILITY

### SURVEILLANCE REQUIREMENTS

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4.0.1 Surveillance Requirements shall be applicable during the OPERATIONAL CONDITIONS or other states specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval.

4.0.3 If it is discovered that a Surveillance requirement was not performed within its specified time interval, then compliance with the requirement to declare the Limiting Condition for Operation not met may be delayed, from the time of the discovery, up to 24 hours or up to the period of the specified time interval, whichever is less. The delay period is permitted to allow performance of the Surveillance Requirement.

If the Surveillance requirement is not performed within the delay period, the Limiting Condition for Operation must immediately be declared not met, and the applicable ACTION(s) must be entered.

When the Surveillance Requirement is performed within the delay period and the Surveillance requirement is not met, the Limiting Condition for Operation must immediately be declared not met, and the applicable ACTION(s) must be entered.

Surveillance requirements do not have to be performed on inoperable equipment.

4.0.4 Entry into an OPERATIONAL CONDITION or other specified applicable state shall not be made unless the Limiting Condition for Operation's Surveillances have been met within the specified frequency. This provision shall not prevent entry into OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

- a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g) (6) (i).

## REACTIVITY CONTROL SYSTEMS

### CONTROL ROD DRIVE COUPLING

#### LIMITING CONDITION FOR OPERATION

3.1.3.6 All control rods shall be coupled to their drive mechanisms.

APPLICABILITY: CONDITIONS 1, 2, and 5\*.

#### ACTION:

- a. In CONDITION 1 or 2 with one control rod not coupled to its associated drive mechanism, operation may continue provided:
  1. Within the preset power level of the RWM, the control rod is declared inoperable and fully inserted until recoupling can be attempted with THERMAL POWER above the preset power level of the RWM and the requirements of Specification 3.1.4.1.d are satisfied.
  2. Above the preset power level of the RWM, the control rod drive is inserted to accomplish recoupling. If recoupling is not accomplished on the first attempt, declare the control rod inoperable, fully insert the control rod, and electrically disarm the directional control valves.
  3. The requirements of Specification 3.1.3.1 are satisfied.
- b. In CONDITION 5\*, with a withdrawn control rod not coupled to its associated drive mechanism, insert the control rod to accomplish recoupling. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.1.3.6 The coupling integrity of a control rod shall be demonstrated by withdrawing the control rod to the fully withdrawn position and verifying that the rod does not go to the overtravel position:

- a. Prior to reactor criticality after completing CORE ALTERATIONS that could have affected the control rod drive coupling integrity.

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\* At least each withdrawn control rod. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.

## REACTIVITY CONTROL SYSTEMS

### 3/4 1.4 CONTROL ROD PROGRAM CONTROLS

#### ROD WORTH MINIMIZER

##### LIMITING CONDITION FOR OPERATION

3.1.4.1 The Rod Worth Minimizer (RWM) shall be OPERABLE when THERMAL POWER is less than 10% of RATED THERMAL POWER.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2\*.

##### ACTION:

- a. With the RWM inoperable after the first 12 control rods have been fully withdrawn on a startup, operation may continue provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- b. With the RWM inoperable before the first 12 control rods are withdrawn on a startup, one startup per calendar year may be performed provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- c. With RWM inoperable on a shutdown, shutdown may continue provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- d. With RWM operable but individual control rod(s) declared inoperable, operation and control rod movement below the preset power level of the RWM may continue provided:
  1. No more than three (3) control rods are declared inoperable in any one BPWS group, and.
  2. The inoperable control rod(s) is bypassed on the RWM and control rod movement of the bypassed rod(s) is verified by a second licensed operator or qualified member of the plant technical staff.
- e. Deleted. |

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\* Entry into OPERATIONAL CONDITION 2 and withdrawal of selected control rods is permitted for the purpose of determining the OPERABILITY of the RWM prior to withdrawal of control rods for the purpose of bringing the reactor to criticality.

## INSTRUMENTATION

### 3/4.3.5 MONITORING INSTRUMENTATION

#### SEISMIC MONITORING INSTRUMENTATION

##### LIMITING CONDITION FOR OPERATION

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3.3.5.1 The seismic monitoring instrumentation shown in Table 3.3.5.1-1 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one or more seismic monitoring instruments inoperable for more than 31 days, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission, within the next 14 days, outlining the cause of the malfunction and the plans for restoring the instruments to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable. |

##### SURVEILLANCE REQUIREMENTS

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4.3.5.1.1 Each of the above required seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3.5.1-1.

4.3.5.1.2 Each of the above required seismic monitoring instruments actuated during a seismic event shall be restored to OPERABLE status within 24 hours and a CHANNEL CALIBRATION performed within 5 days following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. In lieu of any other report required by Specification 6.9.1, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 14 days describing the magnitude, frequency spectrum, and resultant effect upon facility features important to safety.



## INSTRUMENTATION

### ACCIDENT MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.5.3 The accident monitoring instrumentation channels shown in Table 3.3.5.3-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.5.3-1.

#### ACTION:

With one or more accident monitoring instrumentation channels inoperable, take the ACTION required by Table 3.3.5.3-1.

#### SURVEILLANCE REQUIREMENTS

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4.3.5.3 Each of the above required accident monitoring instrumentation channels shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.5.3-1.

TABLE 3.3.5.3-1

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. Reactor Vessel Pressure <sup>(c)</sup>	2	1	1, 2	82
2. Reactor Vessel Water Level <sup>(c)</sup>	2	1	1, 2	82
3. Suppression Chamber Water Level <sup>(c)</sup>	2	1	1, 2	82
4. Suppression Chamber Water Temperature <sup>(c)</sup>	2	1	1, 2	82 <sup>(b)</sup>
5. Suppression Chamber Atmosphere Temperature <sup>(c)</sup>	2	1	1, 2	82 <sup>(b)</sup>
6. Drywell Pressure <sup>(c)</sup>	2	1	1, 2	82
7. Drywell Temperature <sup>(c)</sup>	2	1	1, 2	82 <sup>(b)</sup>
8. Drywell Radiation	2	2	1, 2, 3	81
9. Drywell Oxygen Concentration <sup>(c)</sup>	2	1	1, 2	82
10. Drywell Hydrogen Concentration Analyzer and Monitor <sup>(c)</sup>	2	1	1, 2	82
11. Drywell Area Radiation Monitors	2	2	1, 2	81
12. Safety/Relief Valve Position Indication <sup>(c)</sup> a. Primary - Sonic b. Secondary - Temp.	2/valve	1/valve	1, 2	82
13. Turbine Building Ventilation Monitor <sup>(a)</sup>	1	1	1, 2, 3	81
14. Off-gas Stack Ventilation Monitor <sup>(a)</sup>	1	1	1, 2, 3	81

<sup>(a)</sup> High range noble gas monitors.

<sup>(b)</sup> See also specification 3.6.2.1 for ACTION requirements for the Suppression Pool Temperature Monitoring System Instrumentation.

<sup>(c)</sup> The provisions of Specification 3.0.4 are not applicable.

INSTRUMENTATION

CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

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3.3.5.5 The Control Room Emergency Ventilation System instrumentation shown in Table 3.3.5.5-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.5.5-1.

ACTION:

With one or more detectors inoperable, take the ACTION required by Table 3.3.5.5-1.

SURVEILLANCE REQUIREMENTS

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4.3.5.5 Each of the above required control room emergency ventilation instruments shall be demonstrated OPERABLE by performance of the testing at the frequency required by Table 4.3.5.5-1.

## INSTRUMENTATION

### CHLORIDE INTRUSION MONITOR

#### LIMITING CONDITION FOR OPERATION

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3.3.5.6 The chloride intrusion monitor channels shown in Table 3.3.5.6-1 shall be OPERABLE with alarm setpoints set consistent with the values shown in the Trip Setpoint columns of Table 3.3.5.6-2.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

#### ACTION:

- a. With one or two of the functional units shown in Table 3.3.5.6-1 inoperable, operation may continue.
- b. With three of the functional units shown in Table 3.3.5.6-1 inoperable, sample at least one parameter monitored by the inoperable functional units at least once per 4 hours. The provisions of Specification 3.0.3 are not applicable.
- c. With none of the functional units shown in Table 3.3.5.6-1 OPERABLE, be in at least HOT SHUTDOWN within 12 hours.

#### SURVEILLANCE REQUIREMENTS

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4.3.5.6 The chloride intrusion monitor channels shall be demonstrated OPERABLE by performing the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.5.6-1.

## INSTRUMENTATION

### RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.5.8 The radioactive liquid effluent monitoring instrumentation channels shown in Table 3.3.5.8-1 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.1.1 are not exceeded. The alarm/trip setpoints shall be determined in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY: As shown in Table 3.3.5.8-1.

#### ACTION:

- a. With a radioactive liquid effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, without delay suspend the release of radioactive liquid effluents monitored by the affected channel, declare the channel inoperable, or change the setpoint so it is acceptably conservative.
- b. With less than one radioactive liquid effluent monitoring instrumentation channel in each release pathway OPERABLE, take the ACTION shown in Table 3.3.5.8-1. Return the instruments to OPERABLE status within 30 days or, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- c. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.3.5.8 Each radioactive liquid effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3.5.8-1.

NOTE: See Bases 3/4.3.5.8.

## INSTRUMENTATION

### RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.5.9 The radioactive gaseous effluent monitoring instrumentation channels shown in Table 3.3.5.9-1 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.1 are not exceeded. The setpoints shall be determined in accordance with the methodology as described in the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY: As shown in Table 3.3.5.9-1.

#### ACTION:

- a. With a radioactive gaseous effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, without delay suspend the release of radioactive gaseous effluents monitored by the affected channel, or declare the channel inoperable, or change the setpoint so it is acceptably conservative.
- b. With less than one radioactive gaseous effluent monitoring instrumentation channel OPERABLE, take the ACTION shown in Table 3.3.5.9-1. Return the instruments to OPERABLE status within 30 days or, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- c. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.3.5.9 Each radioactive gaseous effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST at the frequencies shown in Table 4.3.5.9-1.

NOTE: See Bases 3/4.3.5.9.



## PLANT SYSTEMS

### 3/4.7.6 SEALED SOURCE CONTAMINATION

#### LIMITING CONDITION FOR OPERATION

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3.7.6 Each sealed source containing radioactive material in excess of 100 microcuries of beta and/or gamma-emitting material or 5 microcuries of alpha-emitting material shall be free of greater than or equal to 0.005 microcuries of removable contamination.

APPLICABILITY: At all times.

#### ACTION:

Each sealed source with removable contamination in excess of the above limit shall be immediately withdrawn from use and:

- a. Either decontaminated and repaired, or
- b. Disposed of in accordance with Commission Regulations.

The Provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.7.6.1 Test Requirements - Each sealed source shall be tested for leakage and/or contamination by:

- a. The licensee, or
- b. Other persons specifically authorized by the Commission or an Agreement State.

The test method shall have a detection sensitivity of at least 0.005 microcuries per test sample.

4.7.6.2 Test Frequencies - Each category of sealed sources (excluding start-up sources and fission detectors previously subjected to core flux) shall be tested at the frequency described below.

- a. Sources in use - At least once per six months for all sealed sources containing radioactive material:

## RADIOACTIVE EFFLUENTS

### DOSE - LIQUID EFFLUENTS

#### LIMITING CONDITION FOR OPERATION

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3.11.1.2 The dose or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released to UNRESTRICTED AREAS (see Figure 5.1.3-1) shall be limited:

- a. During any calendar quarter to less than or equal to 3 mrem to the total body and to less than or equal to 10 mrem to any organ, and
- b. During any calendar year to less than or equal to 6 mrem to the total body and to less than or equal to 20 mrem to any organ.

APPLICABILITY: At all times.

#### ACTION:

- a. With the calculated doses from the release of radioactive materials in liquid effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions that have been taken to reduce the releases and the proposed corrective action to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.1.2 Dose Calculations - Cumulative dose contributions from liquid effluents for the current calendar quarter and the current calendar year shall be determined in accordance with the ODCM at least once per 31 days.

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NOTE: See Bases 3/4.11.1.2

## RADIOACTIVE EFFLUENTS

### LIQUID RADWASTE TREATMENT SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.11.1.3 The liquid radwaste treatment system shall be used to reduce the radioactive materials in liquid wastes prior to their discharge when the projected doses due to the liquid effluent from the site to UNRESTRICTED AREAS (see Figure 5.1.3-1) would exceed 0.12 mrem to the total body or 0.4 mrem to any organ in a 31-day period.

APPLICABILITY: At all times.

#### ACTION:

- a. With radioactive liquid waste being discharged without treatment and in excess of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
1. Explanation of why liquid radwaste was being discharged without treatment, identification of any inoperable equipment or subsystem, and reason for the inoperability.
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
  3. Summary of description of action(s) taken to prevent a recurrence.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.1.3 Doses due to liquid releases from the site to UNRESTRICTED AREAS shall be projected at least once per 31 days in accordance with the ODCM.

NOTE: See Bases 3/4.11.1.3

## RADIOACTIVE EFFLUENTS

### LIQUID HOLDUP TANKS

Appropriate alternatives to the ACTIONS and Surveillance Requirements below can be accepted if they provide reasonable assurance that in the event of an uncontrolled release of the tanks' content, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

### LIMITING CONDITION FOR OPERATION

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3.11.1.4 The quantity of radioactive material suspended in solution in each of the following unprotected outdoor tanks shall be limited to less than or equal to the activity indicated below, excluding tritium and dissolved or entrained gases.

	<u>OUTSIDE TANK</u>	<u>CURIE LIMIT</u>
a.	Condensate Storage Tank	10 Ci
b.	Outside Temporary Tank	10 Ci

APPLICABILITY: At all times.

#### ACTION:

- a. With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, without delay suspend all addition of radioactive material to the tank, within 48 hours reduce the tank's contents to within the limit, and describe the events leading to this condition in the next Semiannual Radioactive Effluent Release Report.
- b. The provisions of Specification 3.0.3 are not applicable. |

### SURVEILLANCE REQUIREMENTS

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4.11.1.4 The quantity of radioactive material contained in each of the tanks listed shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

NOTE: See Bases 3.4.11.1.4

## RADIOACTIVE EFFLUENTS

### DOSE - NOBLE GASES

#### LIMITING CONDITION FOR OPERATION

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3.11.2.2 The air dose due to noble gases released in gaseous effluents from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation;
- b. During any calendar year: Less than or equal to 20 mrad for gamma radiation and less than or equal to 40 mrad for beta radiation.

APPLICABILITY: At all times.

#### ACTIONS:

- a. With the calculated air dose from radioactive noble gases in gaseous effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions to be taken to reduce the releases, and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.2.2 Dose Calculations - Cumulative dose contributions for noble gases for the current calendar quarter and current calendar year shall be determined in accordance with the ODCM at least once per 31 days.

NOTE: See Bases 3/4.11.2.2

## RADIOACTIVE EFFLUENTS

### DOSE - IODINE-131, IODINE-133, TRITIUM, AND RADIONUCLIDES IN PARTICULATE FORM

#### LIMITING CONDITION FOR OPERATION

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3.11.2.3 The dose to a MEMBER OF THE PUBLIC from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 15 mrem to any organ; and
- b. During any calendar year: Less than or equal to 30 mrem to any organ.
- c. Less than 0.1% of the limits of 3.11.2.3(a) and (b) as a result of burring contaminated oil.

APPLICABILITY: At all times.

#### ACTION:

- a. With the calculated dose from the release of iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit and defines the corrective actions that have been taken to reduce the releases and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.2.3 Dose Calculations - Cumulative dose contributions for the current calendar quarter and current calendar year for iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days shall be determined in accordance with the ODCM at least once per 31 days.

NOTE: See Bases 3/4.11.2.3



RADIOACTIVE EFFLUENTS

GASEOUS RADWASTE TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

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3.11.2.4 The GASEOUS RADWASTE TREATMENT SYSTEM shall be in operation.

APPLICABILITY: Whenever the main condenser air ejector (evacuation) system is in operation.

ACTION:

- a. With gaseous radwaste from the main condenser air ejector system being discharged without treatment for more than 7 days, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Identification of the inoperable equipment or subsystems and the reason for inoperability.
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
  3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specification 3.0.3 are not applicable. |

SURVEILLANCE REQUIREMENTS

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4.11.2.4 The readings of the relevant instruments shall be checked at least once per 12 hours when the main condenser air ejector is in use to ensure that the GASEOUS RADWASTE TREATMENT SYSTEM is functioning.

NOTE: See Bases 3/4.11.2.4

## RADIOACTIVE EFFLUENTS

### VENTILATION EXHAUST TREATMENT SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.11.2.5 The VENTILATION EXHAUST TREATMENT SYSTEM shall be used to reduce radioactive materials in gaseous waste prior to their discharge when the projected doses due to gaseous effluent releases, from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1), would exceed 0.6 mrem to any organ over 31 days.

APPLICABILITY: At all times other than when the VENTILATION EXHAUST TREATMENT SYSTEM is undergoing routine maintenance.

#### ACTION:

- a. With gaseous waste being discharged without treatment and in excess of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Identification of any inoperable equipment or subsystems and the reason for the inoperability;
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status; and
  3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.2.5 Doses due to gaseous releases from the site shall be projected at least once per 31 days, in accordance with the ODCM, when the VENTILATION EXHAUST TREATMENT SYSTEM is not in use.

NOTE: See Bases 3/4.11.2.5

RADIOACTIVE EFFLUENTS

DRYWELL VENTING OR PURGING

LIMITING CONDITION FOR OPERATION

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3.11.2.8 The drywell shall be purged to the environment at a rate in conformance with Specification 3.11.2.1.

APPLICABILITY: Whenever the drywell is vented or purged.

ACTION:

- a. With the requirements of the above specification not satisfied, suspend all VENTING or PURGING of the drywell.
- b. The provisions of Specification 3.0.3 are not applicable. |

SURVEILLANCE REQUIREMENTS

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4.11.2.8 A sample analysis, as defined in Table 4.11.2-1, shall be performed prior to each drywell PURGE.

NOTE: See Bases 3/4.11.2.8

## RADIOACTIVE EFFLUENTS

### 3/4.11.3 SOLID RADIOACTIVE WASTE

#### LIMITING CONDITION FOR OPERATION

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3.11.3 The solid radwaste system shall be used in accordance with a PROCESS CONTROL PROGRAM to process wet radioactive wastes to meet shipping and burial ground requirements.

APPLICABILITY: At all times.

ACTION:

- a. With the provisions of the PROCESS CONTROL PROGRAM not satisfied, suspend shipments of defectively processed or defectively packaged solid radioactive wastes from the site.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.3 The PROCESS CONTROL PROGRAM shall be used to verify the SOLIDIFICATION of at least one representative test specimen from at least every tenth batch of each type of wet radioactive waste (e.g., filter sludges, spent resins, evaporator bottoms, and sodium sulfate solutions).

- a. If any test specimen fails to verify SOLIDIFICATION, the SOLIDIFICATION of the batch under test shall be suspended until such time as additional test specimens can be obtained, alternative SOLIDIFICATION parameters can be determined in accordance with the PROCESS CONTROL PROGRAM, and a subsequent test verifies SOLIDIFICATION. SOLIDIFICATION of the batch may then be resumed using the alternative SOLIDIFICATION parameters determined by the PROCESS CONTROL PROGRAM.
- b. If the initial test specimen from a batch of waste fails to verify SOLIDIFICATION, the PROCESS CONTROL PROGRAM shall provide for the collection of testing of representative test specimens from each consecutive batch of the same type of wet waste until at least 3 consecutive initial test specimens demonstrate SOLIDIFICATION. The PROCESS CONTROL PROGRAM shall be modified as required, as provided in Specification 6.14, to assure SOLIDIFICATION of subsequent batches of waste.

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NOTE: See Bases 3/4.11.3

## RADIOACTIVE EFFLUENTS

### 3/4.11.4 TOTAL DOSE (40 CFR PART 190)

#### LIMITING CONDITION FOR OPERATION

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3.11.4 The annual (calendar year) dose or dose commitment to any MEMBER OF THE PUBLIC, due to releases of radioactivity and radiation from uranium fuel cycle sources shall be limited to less than or equal to 25 mrems to the total body or any organ (except the thyroid, which shall be limited to less than or equal to 75 mrems).

APPLICABILITY: At all times.

#### ACTION:

- a. With the calculated doses from the release of radioactive materials in liquid or gaseous effluents exceeding twice the limits of Specifications 3.11.1.2.a, 3.11.1.2.b, 3.11.2.2.a, 3.11.2.2.b, 3.11.2.3.a, or 3.11.2.3.b, calculations should be made which, in addition to doses due to effluents, include direct radiation contributions from the reactor units and from outside storage tanks to determine whether the above limits of Specification 3.11.4 have been exceeded. If such is the case, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days pursuant to Specification 6.9.2, a Special Report that defines the corrective action to be taken to reduce subsequent releases to prevent recurrence of exceeding the above limits and includes the schedule for achieving conformance with the above limits. This Special Report, as defined in 10 CFR Part 20.405c, shall include an analysis that estimates the radiation exposure (dose) to a MEMBER OF THE PUBLIC from uranium fuel cycle sources, including all effluent pathways and direct radiation, for the calendar year that includes the release(s) covered by this report. It shall also describe levels of radiation and concentrations of radioactive material involved and the cause of the exposure levels or concentrations. If the estimated dose(s) exceeds the above limits; and if the release condition resulting in violation of 40 CFR Part 190 has not already been corrected, the Special Report shall include a request for a variance in accordance with the provisions of 40 CFR Part 190. Submittal of the report is considered a timely request, and a variance is granted until Staff action on the request is complete.
- b. The provisions of Specification 3.0.3 are not applicable. |

RADIOLOGICAL ENVIRONMENTAL MONITORING

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

environmental monitoring program within 30 days. The specific locations from which samples were unavailable may then be deleted from the monitoring program and ODCM. In lieu of a Licensee Event Report and pursuant to Specification 6.9.1.8, identify the cause of unavailability of samples; and identify the new location(s) for obtaining replacement samples in the next Semiannual Radioactive Effluent Release Report, and also include in the report a revised figure(s) and table for the ODCM reflecting the new location(s).

- d. The provisions of Specification 3.0.3 are not applicable. |

SURVEILLANCE REQUIREMENTS

4.12.1 The radiological environmental monitoring samples shall be collected pursuant to Table 3.12.1-1 from the specific locations given in the table and figure(s) in the ODCM and shall be analyzed pursuant to the requirements of Table 3.12.1-1 and the detection capabilities required by Table 4.12.1-1.

NOTE: See Bases 3/4.12.1



RADIOLOGICAL ENVIRONMENTAL MONITORING

3/4.12.2 LAND USE CENSUS

LIMITING CONDITION FOR OPERATION

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3.12.2 A land use census shall be conducted and shall identify within a distance of 8 km (5 miles) the location in each of the 16 meteorological sectors of the nearest milk animal, the nearest resident, and the nearest garden of greater than 50 m<sup>2</sup> (500 ft<sup>2</sup>) producing broadleaf vegetation. (For elevated releases as defined in Regulatory Guide 1.111, Revision 1, July 1977, the land use census shall also identify within a distance of 5 km (3 miles) the location in each of the 16 meteorological sectors of all milk animals and all gardens of greater than 50 m<sup>2</sup> producing broadleaf vegetation.)

Broadleaf vegetable sampling of at least 3 different kinds of vegetation may be performed at the SITE BOUNDARY in each of 2 different direction sectors with the highest D/Qs in lieu of the garden census. Specifications for broadleaf vegetation sampling in Table 3.12.1-1(4c) shall be followed, including analysis of control samples.

APPLICABILITY: At all times.

ACTION:

- a. With a land use census identifying a location(s) that yields a calculated dose or dose commitment greater than the values currently being calculated in Specification 4.11.2.3, in lieu of a Licensee Event Report, identify the new location(s) in the next Semiannual Radioactive Effluent Release Report, pursuant to Specification 6.9.1.8.
- b. With a land use census identifying a location(s) that yields a calculated dose or dose commitment (via the same exposure pathway) 20 percent greater than at a location from which samples are currently being obtained in accordance with Specification 3.12.1, add the new location(s) to the radiological environmental monitoring program within 30 days. The sampling location(s), excluding the central station location, having the lowest calculated dose or dose commitment(s) (via this same exposure pathway) may be deleted from this monitoring program after October 31 of the year in which this land use census was conducted. In lieu of a Licensee Event Report and pursuant to Specification 6.9.1.8, identify the new location(s) in the next Semiannual Effluent Release Report; and also include in the report a revised figure(s) and table for the ODCM reflecting the new location(s).
- c. The provisions of Specification 3.0.3 are not applicable. |

RADIOLOGICAL ENVIRONMENTAL MONITORING

3/4.12.3 INTERLABORATORY COMPARISON PROGRAM

LIMITING CONDITION FOR OPERATION

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3.12.3 Analyses shall be performed on radioactive materials supplied as part of an Interlaboratory Comparison Program that has been approved by the Commission.

APPLICABILITY: At all times.

ACTION:

- a. With analyses not being performed as required above, report the corrective actions taken to prevent a recurrence to the Commission in the Annual Radiological Environmental Operating Report pursuant to Specification 6.9.1.7.
- b. The provisions of Specification 3.0.3 are not applicable. |

SURVEILLANCE REQUIREMENTS

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4.12.3 The Interlaboratory Comparison Program shall be described in the ODCM. A summary of the results, obtained as part of the above required Interlaboratory Comparison Program, shall be included in the Annual Radiological Environmental Operating Report pursuant to Specification 6.9.1.7.

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NOTE: See Bases 3/4.12.3

## 3/4.0 APPLICABILITY

### BASES

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The specifications of this section provide the general requirements applicable to each of the Limiting Conditions for Operation and Surveillance Requirements within Section 3/4.

3.0.1 This specification states the applicability of each specification in terms of defined OPERATIONAL CONDITION and is provided to delineate specifically when each specification is applicable.

3.0.2 This specification defines those conditions necessary to constitute compliance with the terms of an individual Limiting Condition for Operation and associated ACTION requirement.

3.0.3 This specification delineates the ACTION to be taken for circumstances not directly provided for in the ACTION statements and whose occurrence would violate the intent of specification. For example, Specification 3.5.1 calls for the HPCI to be OPERABLE and specifies explicit requirements if it becomes inoperable. Under the terms of Specification 3.0.3, if the required additional systems are not OPERABLE, the facility is to be placed in HOT SHUTDOWN within the next 6 hours and be in COLD SHUTDOWN within the following 30 hours. The unit shall be brought to the required OPERATIONAL CONDITION within the required times by promptly initiating and carrying out an orderly shutdown. It is intended that this guidance also apply whenever an ACTION statement requires a unit to be in STARTUP within 2 hours or in HOT SHUTDOWN within 6 hours.

3.0.4 This Specification establishes limitations on changes in OPERATIONAL CONDITIONS or other specified applicability states when a Limiting Condition for Operation is not met. It precludes placing the unit in a different OPERATIONAL CONDITION or other specified applicability state when the following exist:

- a. The requirements of a Limiting Condition for Operation, in the OPERATIONAL CONDITION or other specified applicability state to be entered, are not met; and
- b. Continued noncompliance with these Limiting Condition for Operation requirements would result in the unit being required to be placed in an OPERATIONAL CONDITION, or other specified applicability state in which the Limiting Condition for Operation does not apply, to comply with the ACTION requirements.

Compliance with ACTION requirements that permit continued operation of the unit for an unlimited period of time in an OPERATIONAL CONDITION or other specified applicability state provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the OPERATIONAL CONDITION change. Therefore, in such cases, entry into an OPERATIONAL CONDITION or other specified applicability state may be

## 3/4.0 APPLICABILITY

### BASES

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#### 3.0.4 (Continued)

made in accordance with the provisions of the ACTION requirements. The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before unit startup.

The provisions of Specification 3.0.4 shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements. In addition, the provisions of Specification 3.0.4 shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that result from a normal shutdown.

Exceptions to Specification 3.0.4 are stated in the individual Specifications. Exceptions may apply to all the ACTION requirements or to a specific ACTION requirement of a Specification.

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by Specification 4.0.3. Therefore, changing OPERATIONAL CONDITIONS or other specified applicability states while in an ACTION, either in compliance with Specification 3.0.4 or where an exception to Specification 3.0.4 is stated, is not a violation of Surveillance Requirement 4.0.1 or Surveillance Requirement 4.0.4 for those Surveillances that do not have to be performed due to the associated inoperable equipment. However, Surveillance Requirements must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected Limiting Condition for Operation.

This specification incorporates the guidance provided in Generic Letter 87-09.

3.0.5 This specification delineates what additional conditions must be satisfied to permit operation to continue, consistent with the ACTION statements for power sources, when a normal or emergency power source is not OPERABLE. It specifically prohibits operation when one division is inoperable because its normal or emergency power source is inoperable and a system, subsystem, train, component, or device in another division is inoperable for another reason.

## APPLICABILITY

### BASES

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#### 3.0.5 (Continued)

The provisions of this specification permit the ACTION statements associated with individual systems, subsystems, trains, components, or devices to be consistent with the ACTION statements of the associated electrical power source. It allows operation to be governed by the time limits of the ACTION statement associated with the Limiting Condition for Operation for the normal or emergency power source, not the individual ACTION statements for each system, subsystem, train, component, or device that is determined to be inoperable solely because of the inoperability of its normal or emergency power source.

For example, Specification 3.8.1.1 requires in part that all four emergency diesel generators be OPERABLE. The ACTION statement provides for a 72-hour out-of-service time when one emergency diesel generator is not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 3.0.5, all systems, subsystems, trains, components, and devices supplied by the inoperable emergency power source would also be inoperable. This would dictate invoking the applicable ACTION statements for each of the applicable Limiting Conditions for Operation. However, the provisions of Specification 3.0.5 permit the time limits for continued operation to be consistent with the ACTION statement for the inoperable emergency diesel generator instead, provided the other specified conditions are satisfied. If they are not satisfied, shutdown is required in accordance with this specification.

As a further example, Specification 3.8.1.1 requires in part that two physically independent circuits between the off-site transmission network and the onsite Class IE distribution system be OPERABLE. The ACTION statement provides a 24-hour out-of-service time when both required off-site circuits are not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 3.0.5, all systems, subsystems, trains, components, and devices supplied by the inoperable normal power sources, both of the off-site circuits, would also be inoperable. This would dictate invoking the applicable ACTION statements for each of the applicable LCOs. However, the provisions of Specification 3.0.5 permit the time limits for continued operation to be consistent with the ACTION statement for the inoperable normal power sources instead, provided the other specified conditions are satisfied. In this case, this would mean that for one division the emergency power source must be OPERABLE (as must be the components supplied by the emergency power source) and all redundant systems, subsystems, trains, components, and devices in the other division must be OPERABLE, or likewise satisfy Specification 3.0.5 (i.e., be capable of performing their design functions and have an emergency power source OPERABLE). In other words, all emergency power sources must be OPERABLE and all redundant systems, subsystems, trains, components, and devices in both divisions must also be OPERABLE. If these conditions are not satisfied, shutdown is required in accordance with this specification.

In Condition 4 or 5, Specification 3.0.5 is not applicable, and thus the individual ACTION statements for each applicable Limiting Condition for Operation in these Conditions must be adhered to.



## APPLICABILITY

### BASES

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4.0.1 This specification provides that surveillance activities necessary to ensure the Limiting Conditions for Operation are met and will be performed during the OPERATIONAL CONDITIONS for which the Limiting Conditions for Operation are applicable. Provisions for additional surveillance activities to be performed without regard to the applicable OPERATIONAL CONDITIONS are provided in the individual Surveillance Requirements.

4.0.2 The provisions of this specification provide allowable tolerances for performing surveillance activities beyond those specified in the nominal surveillance interval. These tolerances are necessary to provide operational flexibility because of scheduling and performance considerations. The phrase "at least" associated with a surveillance frequency does not negate this allowable tolerance value and permits the performance of more frequent surveillance activities. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillance that are not performed during refueling outages.

The tolerance value is sufficiently restrictive to ensure that the reliability associated with the surveillance activity is not significantly degraded beyond that obtained from the nominal specified interval.

4.0.3 This specification establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified time interval. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is less, applies from the point in time that it is discovered that the Surveillance has not been performed in accordance with Surveillance Requirement 4.0.2, and not at the time that the specified time interval was not met.

This delay period provides adequate time to complete Surveillances that have been missed. This delay period permits the completion of a Surveillance before complying with ACTION requirements or other remedial measures that might preclude completion of the Surveillance.

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements.

When a Surveillance with a time interval based upon specified unit conditions or operational situations, is discovered not to have been performed when specified, Surveillance Requirement 4.0.3 allows the full delay period of 24 hours to perform the Surveillance.

Specification 4.0.3 also provides a time limit for completion of Surveillances that become applicable as a consequence of OPERATIONAL CONDITION changes imposed by ACTION requirements.



## APPLICABILITY

### BASES

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#### 4.0.3 (Continued)

Failure to comply with specified time intervals for Surveillance Requirements is expected to be an infrequent occurrence. Use of the delay period established by Surveillance Requirement 4.0.3 is a flexibility which is not intended to be used as an operational convenience to extend Surveillance intervals.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the completion times of the ACTION requirements for the applicable Limiting Condition for Operation conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the completion times of the ACTION requirements for the applicable Limiting Condition for Operation begin immediately upon the failure of the Surveillance.

Completion of the Surveillance within the delay period allowed by this Specification, or within the completion time of the ACTION requirements, restores compliance with Surveillance Requirement 4.0.1.

This specification incorporates the guidance provided in Generic Letter 87-09.

4.0.4 This specification establishes the requirement that all applicable Surveillance Requirements must be met before entry into an OPERATIONAL CONDITION or other applicability state.

This Specification ensures that system and component OPERABILITY requirements and variable limits are met before entry into OPERATIONAL CONDITIONS or other specified applicability states for which these systems and components ensure safe operation of the unit. This Specification applies to changes in OPERATIONAL CONDITIONS or other specified applicability states associated with unit shutdown as well as startup.

The provisions of Specification 4.0.4 shall not prevent entry into OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

The precise requirements for performance of Surveillance Requirements are specified such that exceptions to Specification 4.0.4 are not necessary. The specific time frames and conditions necessary for meeting the Surveillance Requirements are specified in the Surveillance Requirement. This allows performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into an OPERATIONAL CONDITION or other specified applicability state of the associated Limiting Condition for Operation prior to the performance or completion of a Surveillance. A Surveillance that could not be performed until after entering the Limiting Condition for Operation Applicability would have its time interval specified such that it is not "due" until the specific conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note as not required (to be met or performed) until a particular event, condition, or time has been reached.

This specification incorporates the guidance provided in Generic Letter 87-09.

## APPLICABILITY

### BASES

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4.0.5 This specification ensures that inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves will be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50, Section 50.55a. Relief from any of the above requirements has been provided in writing by the Commission and is not a part of these technical specifications.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout these Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. For example, the requirements of Specification 4.0.4 to perform surveillance activities prior to entry into an OPERATIONAL MODE or other specified applicability condition takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows pumps to be tested up to one week after return to normal operation. And, for example, the Technical Specification definition of OPERABLE does not grant a grace period before a device that is not capable of performing its specified function is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

This specification includes a statement that the Inservice Inspection Program for pipe covered by the scope of GL 88-01 will be in conformance with the staff positions on schedule, methods and personnel, and sample expansion included in GL 88-01. This requirement may be removed from the technical specifications in the future in line with the Technical Specification Improvement Programs.

ENCLOSURE 8

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1 AND 2  
NRC DOCKETS 50-325 AND 50-324  
OPERATING LICENSES DPR-71 AND DPR-62  
REQUEST FOR LICENSE AMENDMENTS  
APPLICABILITY AND SURVEILLANCE REQUIREMENTS

TYPED TECHNICAL SPECIFICATION PAGES - UNIT 2

## 3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

### 3/4.0 APPLICABILITY

#### LIMITING CONDITION FOR OPERATION

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3.0.1 Limiting Conditions for Operation and ACTION requirements shall be applicable during the OPERATIONAL CONDITIONS or other states specified for each specification.

3.0.2 Adherence to the requirements of the Limiting Condition for Operation and associated ACTION within the specified time interval shall constitute compliance with the specification. In the event the Limiting Condition for Operation is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.

3.0.3 In the event a Limiting Condition for Operation and/or associated ACTION requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in at least HOT SHUTDOWN within 6 hours and in COLD SHUTDOWN within the following 30 hours unless corrective measures are completed that permit operation under the permissible ACTION statements for the specified time interval as measured from initial discovery or until the reactor is placed in an OPERATIONAL CONDITION in which the specification is not applicable. Exceptions to these requirements shall be stated in the individual specifications.

3.0.4 When a Limiting Condition for Operation is not met, entry into an OPERATIONAL CONDITION or other specified applicability state shall not be made except when the associated ACTIONS to be entered permit continued operation in the OPERATIONAL CONDITION or other specified applicability state for an unlimited period of time. This specification shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

Exceptions to this specification are stated in the individual specifications. These exceptions allow entry into OPERATIONAL CONDITIONS or other specified applicability states when the associated actions to be entered allow unit operation in the OPERATIONAL CONDITIONS or other specified applicability states only for a limited period of time.

3.0.5 When a system, subsystem, train, component, or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystem(s), train(s), component(s), and device(s) are OPERABLE, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, the unit shall be placed in at least HOT SHUTDOWN within 6 hours, and in at least COLD SHUTDOWN within the following 30 hours. This specification is not applicable in Conditions 4 or 5.

## APPLICABILITY

### SURVEILLANCE REQUIREMENTS

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4.0.1 Surveillance Requirements shall be applicable during the OPERATIONAL CONDITIONS or other states specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval.

4.0.3 If it is discovered that a Surveillance Requirement was not performed within its specified time interval, then compliance with the requirement to declare the Limiting Condition for Operation not met may be delayed, from the time of the discovery, up to 24 hours or up to the period of the specified time interval, whichever is less. The delay period is permitted to allow performance of the Surveillance Requirement.

If the Surveillance Requirement is not performed within the delay period, the Limiting Condition for Operation must immediately be declared not met, and the applicable ACTION(s) must be entered.

When the Surveillance Requirement is performed within the delay period and the Surveillance Requirement is not met, the Limiting Condition for Operation must immediately be declared not met, and the applicable ACTION(s) must be entered.

Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.4 Entry into an OPERATIONAL CONDITION or other specified applicable state shall not be made unless the Limiting Condition for Operation's surveillances have been met within the specified frequency. This provision shall not prevent entry into OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

- a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g) (6) (i).



## REACTIVITY CONTROL SYSTEMS

### CONTROL ROD DRIVE COUPLING

#### LIMITING CONDITION FOR OPERATION

3.1.3.6 All control rods shall be coupled to their drive mechanisms.

APPLICABILITY: CONDITIONS 1, 2, and 5\*.

#### ACTION:

- a. In CONDITION 1 or 2 with one control rod not coupled to its associated drive mechanism, operation may continue provided:
  1. Within the preset power level of the RWM, the control rod is declared inoperable and fully inserted until recoupling can be attempted with THERMAL POWER above the preset power level of the RWM and the requirements of Specification 3.1.4.1.d are satisfied.
  2. Above the preset power level of the RWM, the control rod drive is inserted to accomplish recoupling. If recoupling is not accomplished on the first attempt, declare the control rod inoperable, fully insert the control rod, and electrically disarm the directional control valves.
  3. The requirements of Specification 3.1.3.1 are satisfied.
- b. In CONDITION 5\*, with a withdrawn control rod not coupled to its associated drive mechanism, insert the control rod to accomplish recoupling. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.1.3.6 The coupling integrity of a control rod shall be demonstrated by withdrawing the control rod to the fully withdrawn position and verifying that the rod does not go to the overtravel position:

- 
- \* At least each withdrawn control rod. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.



REACTIVITY CONTROL SYSTEMS

3/4 1.4 CONTROL ROD PROGRAM CONTROLS

ROD WORTH MINIMIZER

LIMITING CONDITION FOR OPERATION

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3.1.4.1 The Rod Worth Minimizer (RWM) shall be OPERABLE when THERMAL POWER is less than 10% of RATED THERMAL POWER.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2\*.

ACTION:

- a. With the RWM inoperable after the first 12 control rods have been fully withdrawn on a startup, operation may continue provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- b. With the RWM inoperable before the first 12 control rods are withdrawn on a startup, one startup per calendar year may be performed provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- c. With RWM inoperable on a shutdown, shutdown may continue provided that control rod movement and compliance with the prescribed BPWS control rod pattern are verified by a second licensed operator or qualified member of the plant technical staff.
- d. With RWM operable but individual control rod(s) declared inoperable, operation and control rod movement below the preset power level of the RWM may continue provided:
  1. No more than three (3) control rods are declared inoperable in any one BPWS group, and,
  2. The inoperable control rod(s) is bypassed on the RWM and control rod movement of the bypassed rod(s) is verified by a second licensed operator or qualified member of the plant technical staff.
- e. Deleted. |

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\* Entry into OPERATIONAL CONDITION 2 and withdrawal of selected control rods is permitted for the purpose of determining the OPERABILITY of the RWM prior to withdrawal of control rods for the purpose of bringing the reactor to criticality.

## INSTRUMENTATION

### 3/4.3.5 MONITORING INSTRUMENTATION

#### SEISMIC MONITORING INSTRUMENTATION

##### LIMITING CONDITION FOR OPERATION

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3.3.5.1 The seismic monitoring instrumentation shown in Table 3.3.5.1-1 shall be OPERABLE.

APPLICABILITY: At all times.

##### ACTION:

- a. With one or more seismic monitoring instruments inoperable for more than 31 days, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission, within the next 14 days, outlining the cause of the malfunction and the plans for restoring the instruments to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable. |

##### SURVEILLANCE REQUIREMENTS

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4.3.5.1.1 Each of the above required seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3.5.1-1.

4.3.5.1.2 Each of the above required seismic monitoring instruments actuated during a seismic event shall be restored to OPERABLE status within 24 hours and a CHANNEL CALIBRATION performed within 5 days following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. In lieu of any other report required by Specification 6.9.1, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 14 days describing the magnitude, frequency spectrum, and resultant effect upon facility features important to safety.

## INSTRUMENTATION

### ACCIDENT MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.5.3 The accident monitoring instrumentation channels shown in Table 3.3.5.3-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.5.3-1.

#### ACTION:

With one or more accident monitoring instrumentation channels inoperable, take the ACTION required by Table 3.3.5.3-1.

#### SURVEILLANCE REQUIREMENTS

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4.3.5.3 Each of the above required accident monitoring instrumentation channels shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.5.3-1.

TABLE 3.3.5.3-1

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. Reactor Vessel Pressure <sup>(c)</sup>	2	1	1, 2	82
2. Reactor Vessel Water Level <sup>(c)</sup>	2	1	1, 2	82
3. Suppression Chamber Water Level <sup>(c)</sup>	2	1	1, 2	82
4. Suppression Chamber Water Temperature <sup>(c)</sup>	2	1	1, 2	82 <sup>(b)</sup>
5. Suppression Chamber Atmosphere Temperature <sup>(c)</sup>	2	1	1, 2	82 <sup>(b)</sup>
6. Drywell Pressure <sup>(c)</sup>	2	1	1, 2	82
7. Drywell Temperature <sup>(c)</sup>	2	1	1, 2	82 <sup>(b)</sup>
8. Drywell Radiation	2	2	1, 2, 3	81
9. Drywell Oxygen Concentration <sup>(c)</sup>	2	1	1, 2	82
10. Drywell Hydrogen Concentration Analyzer and Monitor <sup>(c)</sup>	2	1	1, 2	82
11. Drywell Area Radiation Monitors	2	2	1, 2	81
12. Safety/Relief Valve Position Indication <sup>(c)</sup> a. Primary - Sonic b. Secondary - Temp.	2/valve	1/valve	1, 2	82
13. Turbine Building Ventilation Monitor <sup>(a)</sup>	1	1	1, 2, 3	81
14. Off-gas Stack Ventilation Monitor <sup>(a)</sup>	1	1	1, 2, 3	81

<sup>(a)</sup> High range noble gas monitors.

<sup>(b)</sup> See also specification 3.6.2.1 for ACTION requirements for the Suppression Pool Temperature Monitoring System Instrumentation.

<sup>(c)</sup> The provisions of Specification 3.0.4 are not applicable.

INSTRUMENTATION

CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

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3.3.5.5 The Control Room Emergency Ventilation System instrumentation shown in Table 3.3.5.5-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.5.5-1.

ACTION:

With one or more detectors inoperable, take the ACTION required by Table 3.3.5.5-1.

SURVEILLANCE REQUIREMENTS

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4.3.5.5 Each of the above required control room emergency ventilation instruments shall be demonstrated OPERABLE by performance of the testing at the frequency required by Table 4.3.5.5-1.

## INSTRUMENTATION

### CHLORIDE INTRUSION MONITOR

#### LIMITING CONDITION FOR OPERATION

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3.3.5.6 The chloride intrusion monitor channels shown in Table 3.3.5.6-1 shall be OPERABLE with alarm setpoints set consistent with the values shown in the Trip Setpoint columns of Table 3.3.5.6-2.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

#### ACTION:

- a. With one or two of the functional units shown in Table 3.3.5.6-1 inoperable, operation may continue. |
- b. With three of the functional units shown in Table 3.3.5.6-1 inoperable, sample at least one parameter monitored by the inoperable functional units at least once per 4 hours. The provisions of Specification 3.0.3 are not applicable. |
- c. With none of the functional units shown in Table 3.3.5.6-1 OPERABLE, be in at least HOT SHUTDOWN within 12 hours.

#### SURVEILLANCE REQUIREMENTS

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4.3.5.6 The chloride intrusion monitor channels shall be demonstrated OPERABLE by performing the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.5.6-1.



## INSTRUMENTATION

### RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.5.8 The radioactive liquid effluent monitoring instrumentation channels shown in Table 3.3.5.8-1 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.1.1 are not exceeded. The alarm/trip setpoints shall be determined in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY: As shown in Table 3.3.5.8-1.

#### ACTION:

- a. With a radioactive liquid effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, without delay suspend the release of radioactive liquid effluents monitored by the affected channel, declare the channel inoperable, or change the setpoint so it is acceptably conservative.
- b. With less than one radioactive liquid effluent monitoring instrumentation channel in each release pathway OPERABLE, take the ACTION shown in Table 3.3.5.8-1. Return the instruments to OPERABLE status within 30 days or, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- c. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.3.5.8 Each radioactive liquid effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3.5.8-1.

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NOTE: See Bases 3/4.3.5.8.

## INSTRUMENTATION

### RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.5.9 The radioactive gaseous effluent monitoring instrumentation channels shown in Table 3.3.5.9-1 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.1 are not exceeded. The setpoints shall be determined in accordance with the methodology as described in the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY: As shown in Table 3.3.5.9-1.

#### ACTION:

- a. With a radioactive gaseous effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above specification, without delay suspend the release of radioactive gaseous effluents monitored by the affected channel, or declare the channel inoperable, or change the setpoint so it is acceptably conservative.
- b. With less than one radioactive gaseous effluent monitoring instrumentation channel OPERABLE, take the ACTION shown in Table 3.3.5.9-1. Return the instruments to OPERABLE status within 30 days or, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- c. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.3.5.9 Each radioactive gaseous effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST at the frequencies shown in Table 4.3.5.9-1.

NOTE: See Bases 3/4.3.5.9.

## INSTRUMENTATION

### END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.6.2 The end-of-cycle recirculation pump trip (EOC-RPT) system instrumentation channels shown in Table 3.3.6.2-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.6.2-2 and with the END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM RESPONSE TIME as shown in Table 3.3.6.2-3.

APPLICABILITY: OPERATIONAL CONDITION 1, when THERMAL POWER is greater than or equal to 30% of RATED THERMAL POWER and the MCPR limits obtained from the COLR for use with Specification 3.2.2.1 require EOC-RPT.

#### ACTION:

- a. With an end-of-cycle recirculation pump trip system instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values Column of Table 3.3.6.2-2, declare the channel inoperable until the channel is restored to OPERABLE status with the channel setpoint adjusted consistent with the Trip Setpoint value.
- b. With the number of OPERABLE channels one less than required by the Minimum OPERABLE Channels per Trip System requirement for one or both trip systems, place the inoperable channel(s) in the tripped condition within 12 hours.
- c. With the number of OPERABLE channels two or more less than required by the Minimum OPERABLE Channels per Trip System requirement for one trip system and:
  1. If the operable channels consist of one turbine control valve channel and one turbine stop valve channel, place both inoperable channels in the tripped condition within 12 hours.
  2. If the inoperable channels include two turbine control valve channels or two turbine stop valve channels, declare the trip system operable.
- d. With one trip system inoperable, restore the inoperable trip system to OPERABLE status within 72 hours or take the ACTION required by Specification 3.2.2.1.
- e. With both trip systems inoperable, restore at least one trip system to OPERABLE status within one hour or take the ACTION required by Specification 3.2.2.1.

## PLANT SYSTEMS

### 3/4 7.6 SEALED SOURCE CONTAMINATION

#### LIMITING CONDITION FOR OPERATION

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3.7.6 Each sealed source containing radioactive material in excess of 100 microcuries of beta and/or gamma-emitting material or 5 microcuries of alpha-emitting material shall be free of greater than or equal to 0.005 microcuries of removable contamination.

APPLICABILITY: At all times.

#### ACTION:

Each sealed source with removable contamination in excess of the above limit shall be immediately withdrawn from use and:

- a. Either decontaminated and repaired, or
- b. Disposed of in accordance with Commission Regulations.

The Provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.7.6.1 Test Requirements - Each sealed source shall be tested for leakage and/or contamination by:

- a. The licensee, or
- b. Other persons specifically authorized by the Commission or an Agreement State

The test method shall have a detection sensitivity of at least 0.005 microcuries per test sample.

4.7.6.2 Test Frequencies - Each category of sealed sources (excluding start-up sources and fission detectors previously subjected to core flux) shall be tested at the frequency described below.

- a. Sources in use - At least once per six months for all sealed sources containing radioactive material:

## RADIOACTIVE EFFLUENTS

### DOSE - LIQUID EFFLUENTS

#### LIMITING CONDITION FOR OPERATION

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3.11.1.2 The dose or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released to UNRESTRICTED AREAS (see Figure 5.1.3-1) shall be limited:

- a. During any calendar quarter to less than or equal to 3 mrem to the total body and to less than or equal to 10 mrem to any organ, and
- b. During any calendar year to less than or equal to 6 mrem to the total body and to less than or equal to 20 mrem to any organ.

APPLICABILITY: At all times.

#### ACTION:

- a. With the calculated doses from the release of radioactive materials in liquid effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions that have been taken to reduce the releases and the proposed corrective action to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.1.2 Dose Calculations - Cumulative dose contributions from liquid effluents for the current calendar quarter and the current calendar year shall be determined in accordance with the ODCM at least once per 31 days.

NOTE: See Bases 3/4.11.1.2

## RADIOACTIVE EFFLUENTS

### LIQUID RADWASTE TREATMENT SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.11.1.3 The liquid radwaste treatment system shall be used to reduce the radioactive materials in liquid wastes prior to their discharge when the projected doses due to the liquid effluent from the site to UNRESTRICTED AREAS (see Figure 5.1.3-1) would exceed 0.12 mrem to the total body or 0.4 mrem to any organ in a 31-day period.

APPLICABILITY: At all times.

#### ACTION:

- a. With radioactive liquid waste being discharged without treatment and in excess of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
1. Explanation of why liquid radwaste was being discharged without treatment, identification of any inoperable equipment or sub-system, and reason for the inoperability.
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
  3. Summary of description of action(s) taken to prevent a recurrence.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.1.3 Doses due to liquid releases from the site to UNRESTRICTED AREAS shall be projected at least once per 31 days in accordance with the ODCM.

NOTE: See Bases 3/4.11.1.3



## RADIOACTIVE EFFLUENTS

### LIQUID HOLDUP TANKS

Appropriate alternatives to the ACTIONS and Surveillance Requirements below can be accepted if they provide reasonable assurance that in the event of an uncontrolled release of the tanks' content, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

### LIMITING CONDITION FOR OPERATION

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3.11.1.4 The quantity of radioactive material suspended in solution in each of the following unprotected outdoor tanks shall be limited to less than or equal to the activity indicated below, excluding tritium and dissolved or entrained gases.

<u>OUTSIDE TANK</u>	<u>CURIE LIMIT</u>
a. Condensate Storage Tank	10 Ci
b. Outside Temporary Tank	10 Ci

APPLICABILITY: At all times.

#### ACTION:

- a. With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, without delay suspend all addition of radioactive material to the tank, within 48 hours reduce the tank's contents to within the limit, and describe the events leading to this condition in the next Semiannual Radioactive Effluent Release Report.
- b. The provisions of Specification 3.0.3 are not applicable. |

### SURVEILLANCE REQUIREMENTS

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4.11.1.4 The quantity of radioactive material contained in each of the tanks listed shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

NOTE: See Bases 3.4.11.1.4

## RADIOACTIVE EFFLUENTS

### DOSE - NOBLE GASES

#### LIMITING CONDITION FOR OPERATION

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3.11.2.2 The air dose due to noble gases released in gaseous effluents from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation;
- b. During any calendar year: Less than or equal to 20 mrad for gamma radiation and less than or equal to 40 mrad for beta radiation.

APPLICABILITY: At all times.

#### ACTIONS:

- a. With the calculated air dose from radioactive noble gases in gaseous effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions to be taken to reduce the releases, and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.2.2 Dose Calculations - Cumulative dose contributions for noble gases for the current calendar quarter and current calendar year shall be determined in accordance with the ODCM at least once per 31 days.

NOTE: See Bases 3/4.11.2.2

## RADIOACTIVE EFFLUENTS

### DOSE - IODINE-131, IODINE-133, TRITIUM, AND RADIONUCLIDES IN PARTICULATE FORM

#### LIMITING CONDITION FOR OPERATION

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3.11.2.3 The dose to a MEMBER OF THE PUBLIC from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

- a. During any calendar quarter: Less than or equal to 15 mrems to any organ; and
- b. During any calendar year: Less than or equal to 30 mrems to any organ.
- c. Less than 0.1% of the limits of 3.11.2.3(a) and (b) as a result of burning contaminated oil.

APPLICABILITY: At all times.

#### ACTION:

- a. With the calculated dose from the release of iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents exceeding any of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that identifies the cause(s) for exceeding the limit and defines the corrective actions that have been taken to reduce the releases and the proposed corrective actions to be taken to assure that subsequent releases will be in compliance with the above limits.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.2.3 Dose Calculations - Cumulative dose contributions for the current calendar quarter and current calendar year for iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days shall be determined in accordance with the ODCM at least once per 31 days.

NOTE: See Bases 3/4.11.2.3

RADIOACTIVE EFFLUENTS

GASEOUS RADWASTE TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

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3.11.2.4 The GASEOUS RADWASTE TREATMENT SYSTEM shall be in operation.

APPLICABILITY: Whenever the main condenser air ejector (evacuation) system is in operation.

ACTION:

- a. With gaseous radwaste from the main condenser air ejector system being discharged without treatment for more than 7 days, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Identification of the inoperable equipment or subsystems and the reason for inoperability.
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status, and
  3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specification 3.0.3 are not applicable. |

SURVEILLANCE REQUIREMENTS

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4.11.2.4 The readings of the relevant instruments shall be checked at least once per 12 hours when the main condenser air ejector is in use to ensure that the GASEOUS RADWASTE TREATMENT SYSTEM is functioning.

NOTE: See Bases 3/4.11.2.4

RADIOACTIVE EFFLUENTS

VENTILATION EXHAUST TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

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3.11.2.5 The VENTILATION EXHAUST TREATMENT SYSTEM shall be used to reduce radioactive materials in gaseous waste prior to their discharge when the projected doses due to gaseous effluent releases, from the site to areas at and beyond the SITE BOUNDARY (see Figure 5.1.3-1), would exceed 0.6 mrem to any organ over 31 days.

APPLICABILITY: At all times other than when the VENTILATION EXHAUST TREATMENT SYSTEM is undergoing routine maintenance.

ACTION:

- a. With gaseous waste being discharged without treatment and in excess of the above limits, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days, pursuant to Specification 6.9.2, a Special Report that includes the following information:
  1. Identification of any inoperable equipment or subsystems and the reason for the inoperability;
  2. Action(s) taken to restore the inoperable equipment to OPERABLE status; and
  3. Summary description of action(s) taken to prevent a recurrence.
- b. The provisions of Specification 3.0.3 are not applicable. |

SURVEILLANCE REQUIREMENTS

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4.11.2.5 Doses due to gaseous releases from the site shall be projected at least once per 31 days, in accordance with the ODCM, when the VENTILATION EXHAUST TREATMENT SYSTEM is not in use.

NOTE: See Bases 3/4.11.2.5

RADIOACTIVE EFFLUENTS

DRYWELL VENTING OR PURGING

LIMITING CONDITION FOR OPERATION

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3.11.2.8 The drywell shall be purged to the environment at a rate in conformance with Specification 3.11.2.1.

APPLICABILITY: Whenever the drywell is vented or purged.

ACTION:

- a. With the requirements of the above specification not satisfied, suspend all VENTING or PURGING of the drywell.
- b. The provisions of Specification 3.0.3 are not applicable. |

SURVEILLANCE REQUIREMENTS

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4.11.2.8 A sample analysis, as defined in Table 4.11.2-1, shall be performed prior to each drywell PURGE.

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NOTE: See Bases 3/4.11.2.8



## RADIOACTIVE EFFLUENTS

### 3/4.11.3 SOLID RADIOACTIVE WASTE

#### LIMITING CONDITION FOR OPERATION

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3.11.3 The solid radwaste system shall be used in accordance with a PROCESS CONTROL PROGRAM to process wet radioactive wastes to meet shipping and burial ground requirements.

APPLICABILITY: At all times.

#### ACTION:

- a. With the provisions of the PROCESS CONTROL PROGRAM not satisfied, suspend shipments of defectively processed or defectively packaged solid radioactive wastes from the site.
- b. The provisions of Specification 3.0.3 are not applicable. |

#### SURVEILLANCE REQUIREMENTS

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4.11.3 The PROCESS CONTROL PROGRAM shall be used to verify the SOLIDIFICATION of at least one representative test specimen from at least every tenth batch of each type of wet radioactive waste (e.g., filter sludges, spent resins, evaporator bottoms, and sodium sulfate solutions).

- a. If any test specimen fails to verify SOLIDIFICATION, the SOLIDIFICATION of the batch under test shall be suspended until such time as additional test specimens can be obtained, alternative SOLIDIFICATION parameters can be determined in accordance with the PROCESS CONTROL PROGRAM, and a subsequent test verifies SOLIDIFICATION. SOLIDIFICATION of the batch may then be resumed using the alternative SOLIDIFICATION parameters determined by the PROCESS CONTROL PROGRAM.
- b. If the initial test specimen from a batch of waste fails to verify SOLIDIFICATION, the PROCESS CONTROL PROGRAM shall provide for the collection of testing of representative test specimens from each consecutive batch of the same type of wet waste until at least 3 consecutive initial test specimens demonstrate SOLIDIFICATION. The PROCESS CONTROL PROGRAM shall be modified as required, as provided in Specification 6.14, to assure SOLIDIFICATION of subsequent batches of waste.

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NOTE: See Bases 3/4.11.3

## RADIOACTIVE EFFLUENTS

### 3/4.11.4 TOTAL DOSE (40 CFR PART 190)

#### LIMITING CONDITION FOR OPERATION

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3.11.4 The annual (calendar year) dose or dose commitment to any MEMBER OF THE PUBLIC, due to releases of radioactivity and radiation from uranium fuel cycle sources shall be limited to less than or equal to 25 mrems to the total body or any organ (except the thyroid, which shall be limited to less than or equal to 75 mrems).

APPLICABILITY: At all times.

#### ACTION:

- a. With the calculated doses from the release of radioactive materials in liquid or gaseous effluents exceeding twice the limits of Specifications 3.11.1.2.a, 3.11.1.2.b, 3.11.2.2.a, 3.11.2.2.b, 3.11.2.3.a, or 3.11.2.3.b, calculations should be made which, in addition to doses due to effluents, include direct radiation contributions from the reactor units and from outside storage tanks to determine whether the above limits of Specification 3.11.4 have been exceeded. If such is the case, in lieu of a Licensee Event Report, prepare and submit to the Commission within 30 days pursuant to Specification 6.9.2, a Special Report that defines the corrective action to be taken to reduce subsequent releases to prevent recurrence of exceeding the above limits and includes the schedule for achieving conformance with the above limits. This Special Report, as defined in 10 CFR Part 20.405c, shall include an analysis that estimates the radiation exposure (dose) to a MEMBER OF THE PUBLIC from uranium fuel cycle sources, including all effluent pathways and direct radiation, for the calendar year that includes the release(s) covered by this report. It shall also describe levels of radiation and concentrations of radioactive material involved and the cause of the exposure levels or concentrations. If the estimated dose(s) exceeds the above limits; and if the release condition resulting in violation of 40 CFR Part 190 has not already been corrected, the Special Report shall include a request for a variance in accordance with the provisions of 40 CFR Part 190. Submittal of the report is considered a timely request, and a variance is granted until Staff action on the request is complete.
- b. The provisions of Specification 3.0.3 are not applicable. |

RADIOLOGICAL ENVIRONMENTAL MONITORING

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

environmental monitoring program within 30 days. The specific locations from which samples were unavailable may then be deleted from the monitoring program and ODCM. In lieu of a Licensee Event Report and pursuant to Specification 6.9.1.8, identify the cause of unavailability of samples; and identify the new location(s) for obtaining replacement samples in the next Semiannual Radioactive Effluent Release Report, and also include in the report a revised figure(s) and table for the ODCM reflecting the new location(s).

- d. The provisions of Specification 3.0.3 are not applicable. |

SURVEILLANCE REQUIREMENTS

4.12.1 The radiological environmental monitoring samples shall be collected pursuant to Table 3.12.1-1 from the specific locations given in the table and figure(s) in the ODCM and shall be analyzed pursuant to the requirements of Table 3.12.1-1 and the detection capabilities required by Table 4.12.1-1.

NOTE: See Bases 3/4.12.1

TABLE 3.12.1-1 (Continued)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

TABLE NOTATION

- (e) Gamma isotopic analysis means the identification and quantification of gamma-emitting radionuclides that may be attributable to the effluents from the facility.
- (f) The "upstream" sample shall be taken at a distance beyond significant influence of the discharge. The "downstream" sample shall be taken in an area beyond but near the mixing zone. "Upstream" samples in an estuary must be taken far enough upstream to be beyond the plant influence. Salt water shall be sampled only when the receiving water is utilized for recreational activities.
- (g) A composite sample is one in which the quantity (aliquot) of liquid sampled is proportional to the quantity of flowing liquid and in which the method of sampling employed results in a specimen that is representative of the liquid flow. Composite samples shall be collected with equipment that is capable of collecting an aliquot at time intervals that are short (e.g., once per 6 hours) relative to compositing period (e.g., monthly) in order to assure obtaining a representative sample.
- (h) When less than three (3) milking animal locations are available for testing within an 8-km distance, sampling of broadleaf vegetation shall be performed as indicated in Table 3.12.1-1, 4.c. in lieu of milk sampling. |

RADIOLOGICAL ENVIRONMENTAL MONITORING

3/4.12.2 LAND USE CENSUS

LIMITING CONDITION FOR OPERATION

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3.12.2 A land use census shall be conducted and shall identify within a distance of 8 km (5 miles) the location in each of the 16 meteorological sectors of the nearest milk animal, the nearest resident, and the nearest garden of greater than 50 m<sup>2</sup> (500 ft<sup>2</sup>) producing broadleaf vegetation. (For elevated releases as defined in Regulatory Guide 1.111, Revision 1, July 1977, the land use census shall also identify within a distance of 5 km (3 miles) the location in each of the 16 meteorological sectors of all milk animals and all gardens of greater than 50 m<sup>2</sup> producing broadleaf vegetation.)

Broadleaf vegetable sampling of at least 3 different kinds of vegetation may be performed at the SITE BOUNDARY in each of 2 different direction sectors with the highest D/Qs in lieu of the garden census. Specifications for broadleaf vegetation sampling in Table 3.12.1-1(4c) shall be followed, including analysis of control samples.

APPLICABILITY: At all times.

ACTION:

- a. With a land use census identifying a location(s) that yields a calculated dose or dose commitment greater than the values currently being calculated in Specification 4.11.2.3, in lieu of a Licensee Event Report, identify the new location(s) in the next Semiannual Radioactive Effluent Release Report, pursuant to Specification 6.9.1.8.
- b. With a land use census identifying a location(s) that yields a calculated dose or dose commitment (via the same exposure pathway) 20 percent greater than at a location from which samples are currently being obtained in accordance with Specification 3.12.1, add the new location(s) to the radiological environmental monitoring program within 30 days. The sampling location(s), excluding the central station location, having the lowest calculated dose or dose commitment(s) (via this same exposure pathway) may be deleted from this monitoring program after October 31 of the year in which this land use census was conducted. In lieu of a Licensee Event Report and pursuant to Specification 6.9.1.8, identify the new location(s) in the next Semiannual Effluent Release Report; and also include in the report a revised figure(s) and table for the ODCM reflecting the new location(s).
- c. The provisions of Specification 3.0.3 are not applicable. |

RADIOLOGICAL ENVIRONMENTAL MONITORING

3/4.12.3 INTERLABORATORY COMPARISON PROGRAM

LIMITING CONDITION FOR OPERATION

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3.12.3 Analyses shall be performed on radioactive materials supplied as part of an Interlaboratory Comparison Program that has been approved by the Commission.

APPLICABILITY: At all times.

ACTION:

- a. With analyses not being performed as required above, report the corrective actions taken to prevent a recurrence to the Commission in the Annual Radiological Environmental Operating Report pursuant to Specification 6.9.1.7.
- b. The provisions of Specification 3.0.3 are not applicable. |

SURVEILLANCE REQUIREMENTS

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4.12.3 The Interlaboratory Comparison Program shall be described in the ODCM. A summary of the results, obtained as part of the above required Interlaboratory Comparison Program, shall be included in the Annual Radiological Environmental Operating Report pursuant to Specification 6.9.1.7.

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NOTE: See Bases 3/4.12.3



### 3/4.0 APPLICABILITY

#### BASES

The specifications of this section provide the general requirements applicable to each of the Limiting Conditions for Operation and Surveillance Requirements within section 3/4.

3.0.1 This specification states the applicability of each specification in terms of defined OPERATIONAL CONDITION and is provided to delineate specifically when each specification is applicable.

3.0.2 This specification defines those conditions necessary to constitute compliance with the terms of an individual Limiting Condition for Operation and associated ACTION requirement.

3.0.3 This specification delineates the ACTION to be taken for circumstances not directly provided for in the ACTION statements and whose occurrence would violate the intent of specification. For example, Specification 3.5.1 calls for the HPCI to be OPERABLE and specifies explicit requirements if it become inoperable. Under the terms of Specification 3.0.3, if the required additional systems are not OPERABLE, the facility is to be placed in HOT SHUTDOWN within the next 6 hours and be in COLD SHUTDOWN within the following 30 hours. The unit shall be brought to the required OPERATIONAL CONDITION within the required times by promptly initiating and carrying out an orderly shutdown. It is intended that this guidance also apply whenever an ACTION statement requires a unit to be in START-UP within 2 hours or in HOT SHUTDOWN within 6 hours.

3.0.4 This Specification establishes limitations on changes in OPERATIONAL CONDITIONS or other specified applicability states when a Limiting Condition for Operation is not met. It precludes placing the unit in a different OPERATIONAL CONDITION or other specified applicability state when the following exist:

- a. The requirements of a Limiting Condition for Operation, in the OPERATIONAL CONDITION or other specified applicability state to be entered, are not met; and
- b. Continued noncompliance with these Limiting Condition for Operation requirements would result in the unit being required to be placed in an OPERATIONAL CONDITION, or other specified applicability state in which the Limiting Condition for Operation does not apply, to comply with the ACTION requirements.

Compliance with ACTION requirements that permit continued operation of the unit for an unlimited period of time in an OPERATIONAL CONDITION or other specified applicability state provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the OPERATIONAL CONDITION change. Therefore, in such cases, entry into an OPERATIONAL CONDITION or other specified applicability state may be made in accordance with the provisions of the ACTION requirements. The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before unit startup.

## 3/4.0 APPLICABILITY

### BASES

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#### 3.0.4 (Continued)

The provisions of Specification 3.0.4 shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements. In addition, the provisions of Specification 3.0.4 shall not prevent changes in OPERATIONAL CONDITIONS or other specified applicability states that result from a normal shutdown.

Exceptions to Specification 3.0.4 are stated in the individual Specifications. Exceptions may apply to all the ACTION requirements or to a specific ACTION requirement of a Specification.

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by Specification 4.0.3. Therefore, changing OPERATIONAL CONDITIONS or other specified applicability states while in an ACTION, either in compliance with Specification 3.0.4 or where an exception to Specification 3.0.4 is stated, is not a violation of Surveillance Requirement 4.0.1 or Surveillance Requirement 4.0.4 for those Surveillances that do not have to be performed due to the associated inoperable equipment. However, Surveillance Requirements must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected Limiting Condition for Operation.

This specification incorporates the guidance provided in Generic Letter 87-09.

3.0.5 This specification delineates what additional conditions must be satisfied to permit operation to continue, consistent with the ACTION statements for power sources, when a normal or emergency power source is not OPERABLE. It specifically prohibits operation when one division is inoperable because its normal or emergency power source is inoperable and a system, subsystem, train, component, or device in another division is inoperable for another reason.

The provisions of this specification permit the ACTION statements associated with individual systems, subsystems, trains, components, or devices to be consistent with the ACTION statements of the associated electrical power source. It allows operation to be governed by the time limits of the ACTION statement associated with the Limiting Condition for Operation for the normal or emergency power source, not the individual ACTION statements for each system, subsystem, train, component, or device that is determined to be inoperable solely because of the inoperability of its normal or emergency power source.

## APPLICABILITY

### BASES

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#### 3.0.5 (Continued)

For example, Specification 3.8.1.1 requires in part that all four emergency diesel generators be OPERABLE. The ACTION statement provides for a 72-hour out-of-service time when one emergency diesel generator is not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 3.0.5, all systems, subsystems, trains, components, and devices supplied by the inoperable emergency power source would also be inoperable. This would dictate invoking the applicable ACTION statements of each of the applicable Limiting Conditions for Operation. However, the provisions of Specification 3.0.5 permit the time limits for continued operation to be consistent with the ACTION statement for the inoperable emergency diesel generator instead, provided the other specified conditions are satisfied. If they are not satisfied, shutdown is required in accordance with this specification.

As a further example, Specification 3.8.1.1 requires in part that two physically independent circuits between the offsite transmission network and the onsite Class IE distribution system be OPERABLE. The ACTION statement provided a 24-hour out-of-service time when both required offsite circuits are not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 3.0.5, all systems, subsystems, trains, components and devices supplied by the inoperable normal power sources, both of the offsite circuits, would also be inoperable. This would dictate invoking the applicable ACTION statements for each of the applicable LCOs. However, the provisions of Specification 3.0.5 permit the time limits for continued operation to be consistent with the ACTION statement for the inoperable normal power sources instead, provided the other specified conditions are satisfied. In this case, this would mean that for one division, the emergency power source must be OPERABLE (as must be the components supplied by the emergency power source) and all redundant systems, subsystems, trains, components, and devices in the other division must be OPERABLE, or likewise satisfy Specification 3.0.5 (i.e., be capable of performing their design functions and have an emergency power source OPERABLE). In other words, all emergency power sources must be OPERABLE and all redundant systems, subsystems, trains, components, and devices in both divisions must also be OPERABLE. If these conditions are not satisfied, shutdown is required in accordance with this specification.

In Conditions 4 and 5, Specification 3.0.5 is not applicable, and thus the individual ACTION statements for each applicable Limiting Condition for Operation in these Conditions must be adhered to.

## APPLICABILITY

### BASES

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4.0.1 This specification provides that surveillance activities necessary to ensure the Limiting Conditions for Operation are met and will be performed during the OPERATIONAL CONDITIONS for which the Limiting Conditions for Operation are applicable. Provisions for additional surveillance activities to be performed without regard to the applicable OPERATIONAL CONDITIONS are provided in the individual Surveillance Requirements.

4.0.2 The provisions of this specification provide allowable tolerances for performing surveillance activities beyond those specified in the nominal surveillance interval. These tolerances are necessary to provide operational flexibility because of scheduling and performance considerations. The phrase "at least" associated with a surveillance frequency does not negate this allowable tolerance value and permits the performance of more frequent surveillance activities. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillance that are not performed during refueling outages.

The tolerance value is sufficiently restrictive to ensure that the reliability associated with the surveillance activity is not significantly degraded beyond that obtained from the nominal specified interval.

4.0.3 This specification establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified time interval. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is less, applies from the point in time that it is discovered that the Surveillance has not been performed in accordance with Surveillance Requirement 4.0.2, and not at the time that the specified time interval was not met.

This delay period provides adequate time to complete Surveillances that have been missed. This delay period permits the completion of a Surveillance before complying with ACTION requirements or other remedial measures that might preclude completion of the Surveillance.

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements.

When a Surveillance with a time interval based upon specified unit conditions or operational situations, is discovered not to have been performed when specified, Surveillance Requirement 4.0 3 allows the full delay period of 24 hours to perform the Surveillance.

Specification 4.0.3 also provides a time limit for completion of Surveillance that become applicable as a consequence of OPERATIONAL CONDITION changes imposed by ACTION requirements.



## APPLICABILITY

### BASES

#### 4.0.3 (Continued)

Failure to comply with specified time intervals for Surveillance Requirements is expected to be an infrequent occurrence. Use of the delay period established by Surveillance Requirement 4.0.3 is a flexibility which is not intended to be used as an operational convenience to extend Surveillance intervals.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the completion times of the ACTION requirements for the applicable Limiting Condition for Operation Conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the completion times of the ACTION requirements for the applicable Limiting Condition for Operation begin immediately upon the failure of the Surveillance.

Completion of the Surveillance within the delay period allowed by this Specification, or within the completion time of the ACTION requirements, restores compliance with Surveillance Requirement 4.0.1.

This specification incorporates the guidance provided in Generic Letter 67-09.

4.0.4 This specification establishes the requirement that all applicable Surveillance Requirements must be met before entry into an OPERATIONAL CONDITION or other applicability state.

This Specification ensures that system and component OPERABILITY requirements and variable limits are met before entry into OPERATIONAL CONDITIONS or other specified applicability states for which these systems and components ensure safe operation of the unit. This Specification applies to changes in OPERATIONAL CONDITIONS or other specified applicability states associated with unit shutdown as well as startup.

The provisions of Specification 4.0.4 shall not prevent entry into OPERATIONAL CONDITIONS or other specified applicability states that are required to comply with ACTION requirements.

The precise requirements for performance of Surveillance Requirements are specified such that exceptions to Specification 4.0.4 are not necessary. The specific time frames and conditions necessary for meeting the Surveillance Requirements are specified in the Surveillance Requirement. This allows performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into the OPERATIONAL CONDITION or other specified applicability state of the associated Limiting Condition for Operation prior to the performance or completion of a Surveillance. A Surveillance that could not be performed until after entering the Limiting Condition for Operation Applicability would have its time interval specified such that it is not "due" until the specific conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note as not required (to be met or performed) until a particular event, condition, or time has been reached.

This specification incorporates the guidance provided in Generic Letter 87-09.

## APPLICABILITY

### BASES

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4.0.5 This specification ensures that inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves will be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50, Section 50.55a. Relief from any of the above requirements has been provided in writing by the Commission and is not a part of these technical specifications.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout these Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. For example, the requirements of Specification 4.0.4 to perform surveillance activities prior to entry into an OPERATIONAL MODE or other specified applicability condition takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows pumps to be tested up to one week after return to normal operation. And, for example, the Technical Specification definition of OPERABLE does not grant a grace period before a device that is not capable of performing its specified function is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

This specification includes a statement that the Inservice Inspection Program for pipe covered by the scope of GL 88-01 will be in conformance with the staff positions on schedule, methods and personnel, and sample expansion included in GL 88-01. This requirement may be removed from the technical specifications in the future in line with the Technical Specification Improvement Programs.