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SHUTDOWN MARGIN - T_{avg} GREATER THAN 200°F

LIMITING CONDITION FOR OPERATION

3.1.1.1 The SHUTDOWN MARGIN shall be greater than or equal to 1.6% Δk/k.

APPLICABILITY: MODES 1, 2*, 3, and 4.

ACTION:

With the SHUTDOWN MARGIN less than 1.6% Δk/k, immediately initiate and continue boration at greater than or equal to 30 gpm of a solution containing greater than or equal to 7,000 ppm boron or equivalent until the required SHUTDOWN MARGIN is restored.

SURVEILLANCE REQUIREMENTS

4.1.1.1.1 The SHUTDOWN MARGIN shall be determined to be greater than or equal to 1.6% Δk/k:

a. Within 1 hour after detection of an inoperable control rod(s) and at least once per 12 hours thereafter while the rod(s) is inoperable. If the inoperable control rod is immovable or untrippable, the above required SHUTDOWN MARGIN shall be verified acceptable with an increased allowance for the withdrawn worth of the immovable or untrippable control rod(s);

b. When in MODES 1 or 2 with K_{eff} greater than or equal to 1, at least once per 12 hours by verifying that control bank withdrawal is within the limits of Specification 3.1.3.6;

c. When in MODE 2 with K_{eff} less than 1, within 4 hours prior to achieving reactor criticality by verifying that the predicted critical control rod position is within the limits of Specification 3.1.3.6;

d. Prior to initial operation above 5% RATED THERMAL POWER after each fuel loading, by consideration of the factors of Specification 4.1.1.1.1e., below, with the control banks at the maximum insertion limit of Specification 3.1.3.6; and

*See Special Test Exceptions ~~Specification 3.10.1~~. in the Final Safety Analysis Report

Amendment Nos. 72 & 71
August 6, 1992

DELETE

REACTIVITY CONTROL SYSTEMS

3/4.1.2 BORATION SYSTEMS

FLOW PATH - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.1.2.1 As a minimum, one of the following boron injection flow paths shall be OPERABLE with motor-operated valves required to change position and pumps required to operate for boron injection capable of being powered from an OPERABLE emergency power source:

a. A flow path from the boric acid tanks via a boric acid transfer pump and charging pump to the Reactor Coolant System if the boric acid storage tank in Specification 3.1.2.5a. is OPERABLE, or

b. The flow path from the refueling water storage tank via a charging pump to the Reactor Coolant System if the refueling water storage tank in Specification 3.1.2.5b. is OPERABLE.

APPLICABILITY: MODES 5 and 6.

ACTION:

With none of the above flow paths OPERABLE or capable of being powered from an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.1.2.1 At least one of the above required flow paths shall be demonstrated OPERABLE:

a. At least once per 7 days by verifying that the temperature of the flow path is greater than or equal to 65°F when a flow path from the boric acid tanks is used, and

b. At least once per 31 days by verifying that each valve (manual, power-operated or automatic) in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.

Amendment Nos. 72 & 71
August 6, 1992

REACTIVITY CONTROL SYSTEMS

CHARGING PUMP - SHUTDOWN

DELETE

LIMITING CONDITION FOR OPERATION

3.1.2.3 At least one charging pump in the boron injection flow path required by Specification 3.1.2.1 shall be OPERABLE and capable of being powered from an OPERABLE emergency power source.

APPLICABILITY: MODES 5 and 6.

ACTION:

With no charging pump OPERABLE or capable of being powered from an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.1.2.3.1 At least the above required charging pump shall be demonstrated OPERABLE when tested pursuant to Specification 4.0.5. In addition, when the above required charging pump is a centrifugal charging pump, verify that, on recirculation flow, the centrifugal charging pump develops a differential pressure of greater than or equal to 2400 psid.

4.1.2.3.2 All centrifugal charging pumps, excluding the above required OPERABLE pump, shall be demonstrated inoperable* at least once per 12 hours, except when the reactor vessel head is removed, by verifying that the motor breaker D.C. control power is de-energized.

*An inoperable pump may be made OPERABLE for testing per Specification 4.0.5 provided the discharge of the pump has been isolated from the Reactor Coolant System by an isolation valve with power removed from the valve operator, or by a sealed closed manual isolation valve.

REACTIVITY CONTROL SYSTEMS

CHARGING PUMPS - OPERATING

DELETE

LIMITING CONDITION FOR OPERATION

3.1.2.4 At least two charging pumps shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4#.

ACTION:

With only one charging pump OPERABLE, restore at least two charging pumps to OPERABLE status within 72 hours or be in at least HOT STANDBY and borated to a SHUTDOWN MARGIN equivalent to at least 1% Δk/k at 200°F within the next 6 hours; restore at least two charging pumps to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

SURVEILLANCE REQUIREMENTS

4.1.2.4.1 At least two charging pumps shall be demonstrated OPERABLE when tested pursuant to Specification 4.0.5. In addition, when the above required charging pumps include a centrifugal charging pump(s), verify that, on recirculation flow, each required centrifugal charging pump(s) develops a differential pressure of greater than or equal to 2400 psid.

4.1.2.4.2 All centrifugal charging pumps, except the above required OPERABLE pump, shall be demonstrated inoperable* at least once per 12 hours whenever the temperature of one or more of the Reactor Coolant System (RCS) cold legs is less than or equal to 270°F by verifying that the motor breaker D.C. control power is de-energized.

#A maximum of one centrifugal charging pump shall be OPERABLE whenever the temperature of one or more of the RCS cold legs is less than or equal to 270°F.

*An inoperable pump may be made OPERABLE for testing per Specification 4.0.5 provided the discharge of the pump has been isolated from the Reactor Coolant System by an isolation valve with power removed from the valve operator, or by a sealed closed manual isolation valve.

Unit 1 - Amendment No. 100
Unit 2 - Amendment No. 99
April 13, 1995

REACTIVITY CONTROL SYSTEMS

BORATED WATER SOURCE - SHUTDOWN

DELETE

LIMITING CONDITION FOR OPERATION

3.1.2.5 As a minimum, one of the following borated water sources shall be OPERABLE:

a. A Boric Acid Storage System with:

1) A minimum contained borated water volume of 2,499 gallons,
2) A boron concentration between 7,000 and 7,700 ppm, and
3) A minimum solution temperature of 65°F.

b. The Refueling Water Storage Tank (RWST) with:

1) A minimum contained borated water volume of 50,000 gallons,
2) A minimum boron concentration of 2300 ppm, and
3) A minimum solution temperature of 35°F.

APPLICABILITY: MODES 5 and 6.

ACTION:

With no borated water source OPERABLE, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.1.2.5 The above required borated water source shall be demonstrated OPERABLE:

a. At least once per 7 days by:

1) Verifying the boron concentration of the water,

2) Verifying the contained borated water volume, and

3) Verifying the boric acid storage tank solution temperature when it is the source of borated water.

b. At least once per 24 hours by verifying the RWST temperature when it is the source of borated water and the outside ambient air temperature is less than 35°F.

Amendment Nos. 72 & 71
August 6, 1992

REACTIVITY CONTROL SYSTEMS

BORATED WATER SOURCES - OPERATING

DELETE

LIMITING CONDITION FOR OPERATION

3.1.2.6 The following borated water source shall be OPERABLE:

a. A Boric Acid Storage System with:

1) A minimum contained borated water volume of 14,042 gallons,
2) A boron concentration between 7,000 and 7,700 ppm, and
3) A minimum solution temperature of 65°F.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With the Boric Acid Storage System inoperable, restore the system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and borated to a SHUTDOWN MARGIN equivalent to at least 1% $\Delta k/k$ at 200°F; restore the Boric Acid Storage System to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

Unit 1 - Amendment No. 101
Unit 2 - Amendment No. 100
April 14, 1995

DELETE

4.1.2.6 The borated water source shall be demonstrated OPERABLE:

a. At least once per 7 days by:

1) Verifying the boron concentration in the water,

2) Verifying the contained borated water volume of the water source, and

3) Verifying the Boric Acid Storage System solution temperature.

Unit 1 - Amendment No. 101
Unit 2 - Amendment No. 100
April 14, 1995

REACTIVITY CONTROL SYSTEMS

POSITION INDICATION SYSTEM - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.1.3.3 One digital rod position indicator (excluding demand position indication) shall be OPERABLE and capable of determining the control rod position within ± 12 steps for each shutdown or control rod not fully inserted.

APPLICABILITY: MODES 3*#, 4*# and 5*#.

ACTION:

With less than the above required position indicator(s) OPERABLE, immediately open the Reactor Trip System breakers.

SURVEILLANCE REQUIREMENTS

4.1.3.3 Each of the above required digital rod position indicator(s) shall be determined to be OPERABLE by verifying that the digital rod position indicators agree with the demand position indicators within 12 steps when exercised over the full range of rod travel at least once per 18 months.

*With the Reactor Trip System breakers in the closed position.

#See Special Test Exceptions ~~Specification 3.10.4~~ in the Final Safety Analysis Report

SURVEILLANCE REQUIREMENTS

4.2.4.1 The QUADRANT POWER TILT RATIO shall be determined to be within the limit above 50% of RATED THERMAL POWER by:

a. Calculating the ratio at least once per 7 days when the alarm is OPERABLE, and

b. Calculating the ratio at least once per 12 hours during steady-state operation when the alarm is inoperable.

4.2.4.2 The QUADRANT POWER TILT RATIO shall be determined to be within the limit when above 75% of RATED THERMAL POWER with one Power Range channel inoperable by using the movable incore detectors to confirm that the normalized symmetric power distribution, obtained from the 4 pairs of symmetric thimble locations or from a full incore flux map per specification 3.3.3.2, is consistent with the indicated QUADRANT POWER TILT RATIO at least once per 12 hours.

the Final Safety Analysis Report

INSTRUMENTATION

MOVABLE INCORE DETECTORS

DELETE

LIMITING CONDITION FOR OPERATION

3.3.3.2 The Movable Incore Detection System shall be OPERABLE with:

a. At least 75% of the detector thimbles,

b. A minimum of two detector thimbles per core quadrant, and

c. Sufficient movable detectors, drive, and readout equipment to map these thimbles.

APPLICABILITY: When the Movable Incore Detection System is used for:

a. Recalibration of the Excore Neutron Flux Detection System, or

b. Monitoring the QUADRANT POWER TILT RATIO, or

c. Measurement of $F^N_{\Delta H}$, $F_Q(Z)$ and F_{xy}.

ACTION:

With the Movable Incore Detection System inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.2 The Movable Incore Detection System shall be demonstrated OPERABLE at least once per 24 hours by normalizing each detector output when required for:

a. Recalibration of the Excore Neutron Flux Detection System, or

b. Monitoring the QUADRANT POWER TILT RATIO, or

c. Measurement of $F^N_{\Delta H}$, $F_Q(Z)$ and F_{xy}.

Amendment Nos. 55 and 54
June 11, 1990

INSTRUMENTATION

METEOROLOGICAL INSTRUMENTATION

DELETE

LIMITING CONDITION FOR OPERATION

3.3.3.4 The meteorological monitoring instrumentation channels# shown in Table 3.3-8 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

a. With one or more required meteorological monitoring channels inoperable for more than 7 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status.

b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.4 Each of the above meteorological monitoring instrumentation channels shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK and CHANNEL CALIBRATION at the frequencies shown in Table 4.3-5.

#The meteorological monitoring instrumentation channels are common to both units.

Amendment Nos. 55 and 54
June 11, 1990

DELETE

TABLE 3.3-8

METEOROLOGICAL MONITORING INSTRUMENTATION

METEOROLOGICAL TOWER INSTRUMENT AND LOCATION	MINIMUM OPERABLE
1. Wind Speed	
a. Nominal Elev. 25'	1 of 2
b. Nominal Elev. 250'	
2. Wind Direction	
a. Nominal Elev. 25'	1 of 2
b. Nominal Elev. 250'	
3. Air Temperature - ΔT	
a. Nominal Elev. 250'-25'	1 of 2
b. Nominal Elev. 150'-25'	

DELETE

TABLE 4.3-5

METEOROLOGICAL MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Wind Speed		
a. Nominal Elev. 25'	D	SA
b. Nominal Elev. 250'	D	SA
2. Wind Direction		
a. Nominal Elev. 25'	D	SA
b. Nominal Elev. 250'	D	SA
3. Air Temperature - ΔT		
a. Nominal Elev. 250'-25'	D	SA
b. Nominal Elev. 150'-25'	D	SA

INSTRUMENTATION

EXPLOSIVE GAS EFFLUENT MONITORING INSTRUMENTATION

DELETE

LIMITING CONDITION FOR OPERATION

3.3.3.9 Deleted

3.3.3.10 The explosive gas monitoring instrumentation channels (ANR-75 or ANR-76) shall be OPERABLE with their Alarm/Trip Setpoints set to ensure that the limits of Specification 3.11.2.5 are not exceeded.

APPLICABILITY: During GASEOUS RADWASTE SYSTEM operation.

ACTION:

a. With an explosive gas monitoring instrumentation channel (ANR-75 or ANR-76) Alarm/Trip Setpoint less conservative than required by the above specification, declare the channel inoperable and follow action b. below.

b. With only one OPERABLE explosive gas monitoring instrumentation channel, operation of this system may continue for up to 14 days. After 14 days or with no channels OPERABLE, operation of this system may continue provided grab samples are collected at least once per 4 hours and analyzed within the following 4 hours.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.9 Deleted

4.3.3.10.1 Each explosive gas monitoring instrumentation channel shall be demonstrated OPERABLE by performance of a daily CHANNEL CHECK and a monthly CHANNEL FUNCTIONAL TEST.

4.3.3.10.2 Each explosive gas monitoring instrumentation channel shall be demonstrated OPERABLE by performance of a quarterly CHANNEL CALIBRATION. The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

a. Two volume percent oxygen, balance nitrogen, and

b. Four volume percent oxygen, balance nitrogen.

Amendment Nos. 67 and 66
January 22, 1992

REFUELING OPERATIONS

3/4.9.3 DECAY TIME

DELETE

LIMITING CONDITION FOR OPERATION

3.9.3 The reactor shall be subcritical for at least 100 hours.

APPLICABILITY: During movement of irradiated fuel in the reactor vessel.

ACTION:

With the reactor subcritical for less than 100 hours, suspend all operations involving movement of irradiated fuel in the reactor vessel.

SURVEILLANCE REQUIREMENTS

4.9.3 The reactor shall be determined to have been subcritical for at least 100 hours by verification of the date and time of subcriticality prior to movement of irradiated fuel in the reactor vessel.

REFUELING OPERATIONS

3/4.9.5 COMMUNICATIONS

DELETE

LIMITING CONDITION FOR OPERATION

3.9.5 Direct communications shall be maintained between the control room and personnel at the refueling station.

APPLICABILITY: During CORE ALTERATIONS.

ACTION:

When direct communications between the control room and personnel at the refueling station cannot be maintained, suspend all CORE ALTERATIONS.

SURVEILLANCE REQUIREMENTS

4.9.5 Direct communications between the control room and personnel at the refueling station shall be demonstrated within 1 hour prior to the start of and at least once per 12 hours during CORE ALTERATIONS.

REFUELING OPERATIONS

3/4.9.6 MANIPULATOR CRANE

DELETE

LIMITING CONDITION FOR OPERATION

3.9.6 The manipulator crane and auxiliary hoist shall be used for movement of control rods or fuel assemblies and shall be OPERABLE with:

a. The manipulator crane used for movement of fuel assemblies having:

1) A minimum capacity of 3250 pounds, and

2) An overload cut off limit less than or equal to 2700 pounds.

b. The auxiliary hoist used for movement of control rods having:

1) A minimum capacity of 700 pounds, and

2) A load indicator which shall be monitored to preclude lifting loads in excess of 600 pounds.

APPLICABILITY: During movement of control rods or fuel assemblies within the reactor vessel.

ACTION:

With the requirements for crane and/or hoist OPERABILITY not satisfied, suspend use of any inoperable manipulator crane and/or auxiliary hoist from operations involving the movement of control rods and fuel assemblies within the reactor vessel.

SURVEILLANCE REQUIREMENTS

4.9.6.1 Each manipulator crane used for movement of fuel assemblies within the reactor vessel shall be demonstrated OPERABLE within 100 hours prior to removal of the reactor vessel head by performing a load test of at least 3250 pounds and demonstrating an automatic load cut off when the crane load exceeds 2700 pounds.

4.9.6.2 Each auxiliary hoist and associated load indicator used for movement of control rods within the reactor vessel shall be demonstrated OPERABLE within 100 hours prior to removal of the reactor vessel head by performing a load test of at least 700 pounds.

DELETE

3/4.9.7 CRANE TRAVEL - FUEL HANDLING BUILDING

LIMITING CONDITION FOR OPERATION

3.9.7 Loads in excess of 2500 pounds* shall be prohibited from travel over fuel assemblies in the spent fuel pool.

APPLICABILITY: With fuel assemblies in the spent fuel pool.

ACTION:

a. With the requirements of the above specification not satisfied, place the crane load in a safe condition.

b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.7 Loads shall be verified to be less than 2500 pounds prior to movement over fuel assemblies in the spent fuel pool.

*The movable fuel handling building walls may travel over fuel assemblies in the spent fuel pool.

Amendment Nos. 55 and 54
June 11, 1990

REFUELING OPERATIONS

WATER LEVEL - REACTOR VESSEL

CONTROL RODS

DELETE

LIMITING CONDITION FOR OPERATION

3.9.10.2 At least 23 feet of water shall be maintained over the top of the irradiated fuel assemblies within the reactor pressure vessel.

APPLICABILITY: During movement of control rods within the reactor pressure vessel while in MODE 6.

ACTION:

With the requirements of the above specification not satisfied, suspend all operations involving movement of control rods within the pressure vessel. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.10.2 The water level shall be determined to be at least its minimum required depth within 2 hours prior to the start of and at least once per 24 hours thereafter during movement of control rods within the reactor pressure vessel.

Amendment Nos. 39 and 38
June 7, 1989

REFUELING OPERATIONS

3/4.9.13 SPENT FUEL SHIPPING CASK MOVEMENT

DELETE

LIMITING CONDITION FOR OPERATION

3.9.13 No spent fuel shipping cask handling operation near the spent fuel pool (i.e., any movement of a cask located north of column line 12.9 for Unit 1 or south of column line 23.1 for Unit 2) shall be performed with fuel in the spent fuel cask exclusion zone identified in Figure 3.9-1.

APPLICABILITY: During all cask handling operations.

ACTION:

With the requirements of the above specification not satisfied, move the cask out of the specified area(s), or move spent fuel from all locations in the racks within the exclusion zone identified in Figure 3.9-1.

SURVEILLANCE REQUIREMENTS

4.9.13 Racks within the exclusion zone identified in Figure 3.9-1 shall be verified to contain no fuel prior to the movement of the cask into the specified area.

Amendment Nos. 8 and 6
May 30, 1986

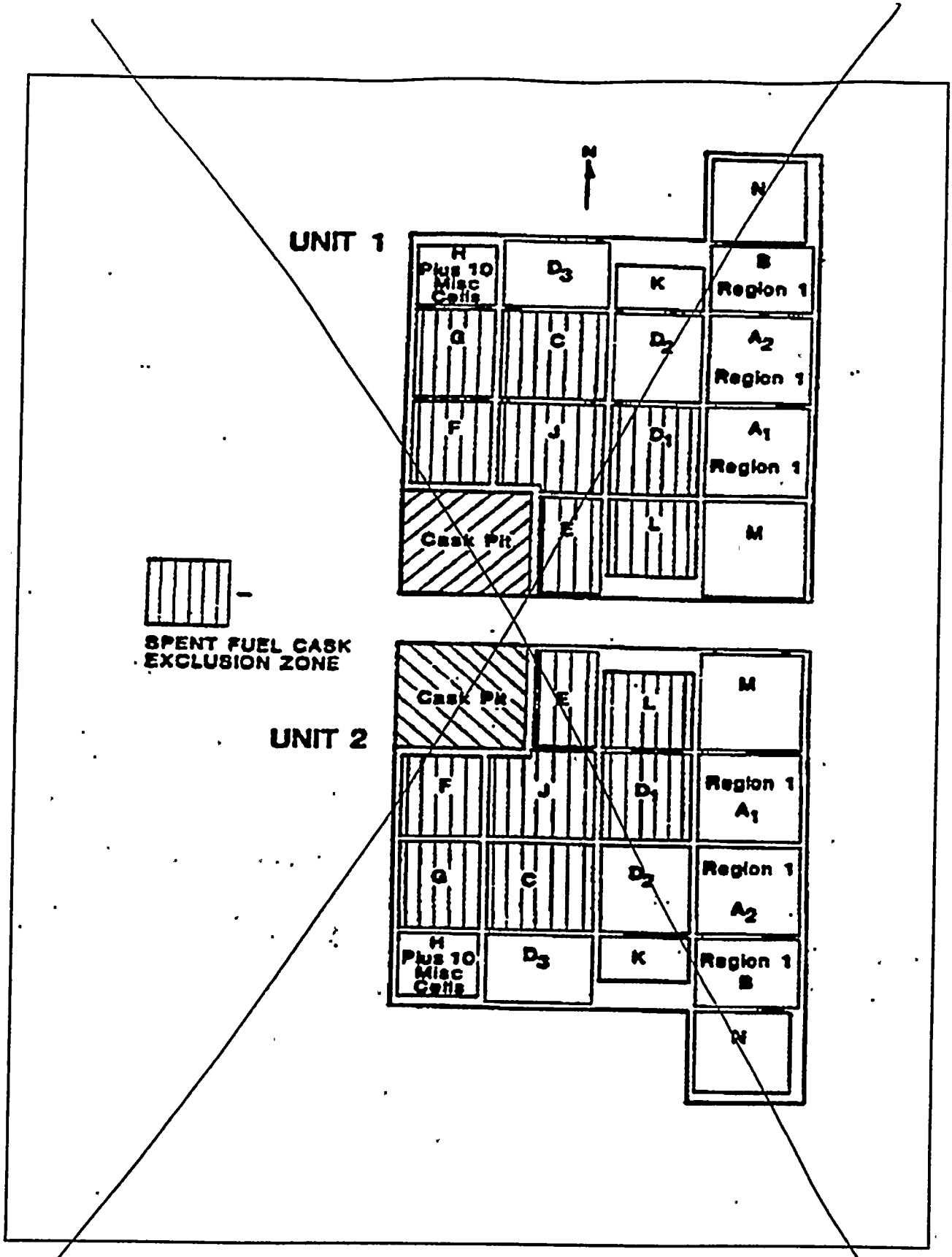

FIGURE 3.9-1 UNITS 1 AND 2 SPENT FUEL POOL LAYOUT

Amendment Nos. 8 and 6
May 30, 1986

3/4.10 SPECIAL TEST EXCEPTIONS

3/4.10.1 SHUTDOWN MARGIN

DELETE

LIMITING CONDITION FOR OPERATION

3.10.1 The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 may be suspended for measurement of control rod worth and shutdown margin provided reactivity equivalent to at least the highest estimated control rod worth is available for trip insertion from OPERABLE control rod(s).

APPLICABILITY: MODE 2.

ACTION:

a. With any full-length control rod not fully inserted and with less than the above reactivity equivalent available for the trip insertion immediately initiate and continue boration at greater than or equal to 30 gpm of a solution containing greater than or equal to 7,000 ppm boron or its equivalent until the SHUTDOWN MARGIN required by Specification 3.1.1.1 is restored.

b. With all full-length control rods fully inserted and the reactor subcritical by less than the above reactivity equivalent, immediately initiate and continue boration at greater than or equal to 30 gpm of a solution containing greater than or equal to 7,000 ppm boron or its equivalent until the SHUTDOWN MARGIN required by Specification 3.1.1.1 is restored.

SURVEILLANCE REQUIREMENTS

4.10.1.1 The position of each full-length control rod either partially or fully withdrawn shall be determined at least once per 2 hours.

4.10.1.2 Each full-length control rod not fully inserted shall be demonstrated capable of full insertion when tripped from at least the 50% withdrawn position within 24 hours prior to reducing the SHUTDOWN MARGIN to less than the limits of Specification 3.1.1.1.

Amendment Nos. 72 & 71
August 6, 1992

SPECIAL TEST EXCEPTIONS

DELETE

3/4.10.4 POSITION INDICATION SYSTEM - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.10.4 The limitations of Specification 3.1.3.3 may be suspended during the performance of individual full-length shutdown and control rod drop time measurements provided only one shutdown or control bank is withdrawn from the fully inserted position at a time.

APPLICABILITY: MODES 3, 4 and 5 during performance of rod drop time measurements and during surveillance of digital rod position indicators for OPERABILITY.

ACTION:

With the Position Indication Systems inoperable or with more than one bank of rods withdrawn, immediately open the Reactor trip breakers.

SURVEILLANCE REQUIREMENTS

4.10.4 The above required Position Indication Systems shall be determined to be OPERABLE within 24 hours prior to the start of and at least once per 24 hours thereafter during rod drop time measurements by verifying the Demand Position Indication System and the Digital Rod Position Indication System agree:

a. Within 12 steps when the rods are stationary, and

b. Within 24 steps during rod motion.

RADIOACTIVE EFFLUENTS

LIQUID HOLDUP TANKS

DELETE

LIMITING CONDITION FOR OPERATION

3.11.1.1 - 3.11.1.3 Deleted

3.11.1.4 The quantity of radioactive material contained in any temporary outdoor tanks shall be limited to less than or equal to 10 curies, excluding tritium and dissolved or entrained noble gases.

APPLICABILITY: At all times.

ACTION:

a. With the quantity of radioactive material in any of the temporary outdoor tanks exceeding the above limit, immediately suspend all additions of radioactive material to the tank, within 48 hours reduce the tank contents to within the limit, and describe the events leading to this condition in the next Annual Radioactive Effluent Release Report, pursuant to Specification 6.9.1.6.

b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1.1 - 4.11.1.3 Deleted

4.11.1.4 The quantity of radioactive material contained in each of the temporary outdoor tanks 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.

Amendment Nos. 91 & 90
April 6, 1994

RADIOACTIVE EFFLUENTS

EXPLOSIVE GAS MIXTURE

DELETE

LIMITING CONDITION FOR OPERATION

3.11.2.1 - 3.11.2.4 Deleted

3.11.2.5 The concentration of oxygen in the GASEOUS RADWASTE SYSTEM shall be limited to less than or equal to 2% by volume whenever the hydrogen concentration exceeds 4% by volume.

APPLICABILITY: At all times.

ACTION:

a. With the concentration of oxygen in the GASEOUS RADWASTE SYSTEM greater than 2% by volume but less than or equal 4% by volume, reduce the oxygen concentration to the above limits within 48 hours.

b. With the concentration of oxygen in the GASEOUS RADWASTE SYSTEM greater than 4% by volume and the hydrogen concentration greater than 4% by volume, immediately suspend all additions of waste gases to the system and reduce the concentration of oxygen to less than or equal to 4% by volume, then take ACTION a., above.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.1 - 4.11.2.4 Deleted

4.11.2.5 The concentration of hydrogen* and oxygen in the GASEOUS RADWASTE SYSTEM shall be determined to be within the above limits by monitoring the waste gases in the GASEOUS RADWASTE SYSTEM with the hydrogen and continuous oxygen monitors required OPERABLE by Table 3.3-13 of Specification 3.3.3.10.

*If monitoring of the waste gases for hydrogen is not performed, the hydrogen concentration shall be assumed to be greater than 4% by volume.

Amendment Nos. 67 and 66
January 22, 1992

RADIOACTIVE EFFLUENTS

GAS STORAGE TANKS

DELETE

LIMITING CONDITION FOR OPERATION

3.11.2.6 The quantity of radioactivity contained in each gas decay tank shall be limited to less than or equal to 10^5 curies noble gases (considered as Xe-133 equivalent).

APPLICABILITY: At all times.

ACTION:

a. With the quantity of radioactive material in any gas decay tank exceeding the above limit, immediately suspend all additions of radioactive material to the tank, within 48 hours reduce the tank contents to within the limit, and describe the events leading to this condition in the next Annual Radioactive Effluent Release Report, pursuant to Specification 6.9.1.6.

b. The provisions of Specification 3.0.3 are not applicable.

3.11.3 Deleted

3.11.4 Deleted

SURVEILLANCE REQUIREMENTS

4.11.2.6 The quantity of radioactive material contained in each gas decay tank shall be determined to be within the above limit at least once 7 days when radioactive materials are being added to the tank and at least once per 24 hours during primary coolant system degassing operations.

4.11.3 Deleted

4.11.4 Deleted

Unit 1 - Amendment No. 102
Unit 2 - Amendment No. 101
July 25, 1995

3/4.1.1.4 MINIMUM TEMPERATURE FOR CRITICALITY

This specification ensures that the reactor will not be made critical with the Reactor Coolant System average temperature less than 541°F. This limitation is required to ensure: (1) the moderator temperature coefficient is within its analyzed temperature range, (2) the protective instrumentation is within its normal operating range, (3) the pressurizer is capable of being in an OPERABLE status with a steam bubble, and (4) the reactor vessel is above its minimum RT_{NDT} temperature.

3/4.1.2 BORATION SYSTEMS ← DELETED

The boron injection system ensures that negative reactivity control is available during each mode of facility operation. The components required to perform this function include: (1) borated water sources, (2) charging pumps, (3) separate flow paths, (4) boric acid transfer pumps, and (5) an emergency power supply from OPERABLE diesel generators.

With the RCS average temperature above 200°F, a minimum of two boron injection flow paths are required to ensure single functional capability in the event an assumed failure renders one of the flow paths inoperable. The boration capability of either flow path is sufficient to provide a SHUTDOWN MARGIN from expected operating conditions of 1.6% Δk/k after xenon decay and cooldown to 200°F. The maximum expected boration capability requirement occurs at BOL when borating from hot zero power to COLD SHUTDOWN and requires 14,042 gallons of 7,000 ppm borated water from the boric acid storage tanks or 65,784 gallons of 2300 ppm borated water from the refueling water storage tank.

With the RCS temperature below 200°F, one Boron Injection System is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the additional restrictions prohibiting CORE ALTERATIONS and positive reactivity change in the event the single injection system becomes inoperable.

The boron capability required below 200°F is sufficient to provide a SHUTDOWN MARGIN of 1% Δk/k after xenon decay and cooldown from 200°F to 140°F. This condition requires either 2,499 gallons of 7,000 ppm borated water from the boric acid storage tanks or 17,865 gallons of 2300 ppm borated water from the refueling water storage tank.

The limits on contained water volume and boron concentration of the RWST also ensure a pH value of between 8.0 and 9.5 for the solution recirculated within containment after a LOCA. This pH band minimizes the evolution of iodine and minimizes the effect of chloride and caustic stress corrosion on mechanical systems and components.

Amendment Nos. 72 & 71
August 6, 1992

BORATION SYSTEMS (Continued)

The contained water volume limits include allowance for water not available because of discharge line location and other physical characteristics.

The OPERABILITY of one Boron Injection System during REFUELING ensures that this system is available for reactivity control while in MODE 6.

The limitation for a maximum of one centrifugal charging pump to be OPERABLE and the Surveillance Requirement to verify all centrifugal charging pumps except the required OPERABLE pump to be inoperable below 270°F provides assurance that a mass addition pressure transient can be relieved by the operation of a single PORV.

3/4.1.3 MOVABLE CONTROL ASSEMBLIES

The specifications of this section ensure that: (1) acceptable power distribution limits are maintained, (2) the minimum SHUTDOWN MARGIN is maintained, and (3) the potential effects of rod misalignment on associated accident analyses are limited. OPERABILITY of the control rod position indicators is required to determine control rod positions and thereby ensure compliance with the control rod alignment and insertion limits. Group demand position can be determined from: (1) the group step counters, or (2) the plant computer, or (3) for control rods, the P to A converter at the rod control cabinet.

The ACTION statements which permit limited variations from the basic requirements are accompanied by additional restrictions which ensure that the original design criteria are met. Continued operation of the Rod Control system is allowed with multiple immovable rods, that are still trippable and within alignment, for periods up to 72 hours to allow maintenance and/or testing of the Rod Control system (additional information is included in Attachment C of the Westinghouse letter to the NRC on Movable Assemblies, December 21, 1984.) Misalignment of a rod requires measurement of peaking factors and a restriction in THERMAL POWER. These restrictions provide assurance of fuel rod integrity during continued operation. In addition, those accident analyses affected by a misaligned rod are reevaluated to confirm that the results remain valid during future operation.

The maximum rod drop time restriction is consistent with the assumed rod drop time used in the safety analyses. Measurement with T_{avg} greater than or equal to 541°F and with all reactor coolant pumps operating ensures that the measured drop times will be representative of insertion times experienced during a Reactor trip at operating conditions.

Control rod positions and OPERABILITY of the rod position indicators are required to be verified on a nominal basis of once per 12 hours with more frequent verifications required if an automatic monitoring channel is inoperable. These verification frequencies are adequate for assuring that the applicable LCO's are satisfied.

Unit 1 - Amendment No. 100
Unit 2 - Amendment No. 99
April 13, 1995

REACTOR PROTECTION SYSTEM and ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (Continued)

The Engineered Safety Features Actuation System interlocks perform the following functions:

P-4 Reactor tripped - Actuates Turbine trip, closes main feedwater valves on T_{avg} below Setpoint, prevents the opening of the main feedwater valves which were closed by a Safety Injection or High Steam Generator Water Level signal, allows Safety Injection block so that components can be reset or tripped.

Reactor not tripped - prevents manual block of Safety Injection.

P-11 On increasing pressurizer pressure, P-11 automatically reinstates Safety Injection actuation on low pressurizer pressure and low steam line pressure and blocks steam line isolation on steam line pressure negative rate - high. If Safety Injection on low steam line pressure is manually enabled, P-11 will automatically block steam line isolation on steam line pressure negative rate - high. On decreasing pressurizer pressure, P-11 permits the manual block of safety injection on low pressurizer pressure and low steam line pressure and automatically enables steam line isolation on steam line pressure negative rate - high.

3/4.3.3 MONITORING INSTRUMENTATION

3/4.3.3.1 RADIATION MONITORING FOR PLANT OPERATIONS

The OPERABILITY of the radiation monitoring channels ensures that: (1) the radiation levels are continually measured in the areas served by the individual channels and (2) the alarm or automatic action is initiated when the radiation level trip setpoint is exceeded.

3/4.3.3.2 ~~MOVABLE INCORE DETECTORS~~ ← DELETED

~~The OPERABILITY of the movable incore detectors with the specified minimum complement of equipment ensures that the measurements obtained from use of this system accurately represent the spatial neutron flux distribution of the core. The OPERABILITY of this system is demonstrated by irradiating each detector used and determining the acceptability of its voltage curve.~~

~~For the purpose of measuring $F_Q(Z)$ or $F^N_{\Delta H}$ a full incore flux map is used.~~

~~Quarter-core flux maps, as defined in WCAP-8648, June 1976, may be used in recalibration of the Excore Neutron Flux Detection System, and full incore flux maps or symmetric incore thimbles may be used for monitoring the QUADRANT POWER TILT RATIO when one Power Range channel is inoperable.~~

Amendment Nos. 84 and 83
Effective Cycle 7

3/4.3.3.3 SEISMIC INSTRUMENTATION

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility to determine if plant shutdown is required pursuant to Appendix A of 10 CFR Part 100. The instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes."

3/4.3.3.4 METEOROLOGICAL INSTRUMENTATION DELETED

The OPERABILITY of the meteorological instrumentation ensures that sufficient meteorological data is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public and is consistent with the recommendations of Regulatory Guide 1.23, "Onsite Meteorological Programs," February 1972.

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

BACKGROUND

The Remote Shutdown Instrumentation and Controls provide the control room operator with sufficient instrumentation and controls to place and maintain the unit in a safe shutdown condition from a location other than the control room. This capability is necessary to protect against the possibility that the control room becomes inaccessible. A safe shutdown condition is defined as MODE 3. With the unit in MODE 3, the Auxiliary Feedwater (AFW) System and the steam generator (SG) safety valves can be used to remove core decay heat and meet all safety requirements. The long term supply of water for the AFW System allows extended operation in MODE 3 from outside the control room until such a time that either control is transferred back to the control room or a cooldown is initiated.

In the event that the control room becomes inaccessible, the operators can establish control at the remote shutdown panel (hot shutdown panel), and place and maintain the unit in MODE 3. Not all controls and necessary transfer switches are located at the hot shutdown panel. Some controls and transfer switches will have to be operated locally at the switchgear, motor control panels, or other local stations. The unit automatically reaches MODE 3 following a unit shutdown and can be maintained safely in MODE 3 for an extended period of time.

The OPERABILITY of the remote shutdown control and instrumentation functions ensures there is sufficient information available on selected unit parameters to place and maintain the unit in MODE 3 should the control room become inaccessible.

3/4.3.3.10 EXPLOSIVE GAS MONITORING INSTRUMENTATION — DELETED

The explosive gas instrumentation is provided for monitoring (and controlling) the concentrations of potentially explosive gas mixtures in the GASEOUS RADWASTE SYSTEM.

3/4.3.4 TURBINE OVERSPEED PROTECTION

This specification is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety related components, equipment or structures.

The quarterly valve test frequency required by Specification 4.3.4.1.2a, is based on Diablo Canyon operating experience and the results of an evaluation documented in WCAP-11525, "Probabilistic Evaluation of Reduction in Turbine Valve Test Frequency," June 1987. The evaluation shows that for Diablo Canyon the probability of turbine missile generation is within the NRC acceptance criteria (letter from C. E. Rossi, USNRC, to J. A. Martin, Westinghouse, dated February 2, 1987) for turbine valve test intervals up to seven months.

3/4.5.5 REFUELING WATER STORAGE TANK (Continued)

APPLICABILITY

In MODES 1, 2, 3, and 4, RWST OPERABILITY requirements are dictated by ECCS and CS System OPERABILITY requirements. Since the ECCS and CS System must be OPERABLE in MODES 1, 2, 3, and 4, the RWST must also be OPERABLE to support their operation. In MODES 5 and 6, RWST OPERABILITY requirements are dictated by reactivity control requirements in ~~TS 3/4.1.2.5, "Borated Water Sources Shutdown."~~ the Final Safety Analysis Report.

ACTIONS

With RWST boron concentration not within limits, the boron concentration must be returned to within limits within 8 hours. Under these conditions, the ECCS and the CS System are not fully qualified to perform their design function. The 8-hour limit to restore boron concentration to within limits was developed considering the time required to change the boron concentration and the fact that the contents of the tank are still available for injection.

With the RWST inoperable for reasons other than boron concentration, it must be restored to OPERABLE status within 1 hour. In this condition, sufficient water is not available in the RWST to assure core recovery and adequate sump volume for recirculation. Therefore, prompt action must be taken to restore the tank to OPERABLE status or to place the plant in a MODE in which the requirements for the RWST are less restrictive.

If the RWST cannot be returned to OPERABLE status within the associated Action Time, the plant must be brought to a MODE in which the LCO for the RWST is less restrictive. To achieve this status, the plant must be brought to at least Hot Standby (Mode 3) within 6 hours and to Cold Shutdown (Mode 5) within the following 30 hours. Based on operating experience, the allowed Action Times are reasonable to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE REQUIREMENTS

Surveillance of the RWST ensures that an adequate supply of borated water is available to cool and depressurize the containment in the event of a DBA, to cool and cover the core in the event of a LOCA, to maintain the reactor subcritical following a DBA, to ensure adequate borated water level in the containment sump to support RHR pump operation in the recirculation mode, and to provide an alternate borated water source for reactivity control.

To be considered OPERABLE, the RWST must meet the water volume and boron concentration established in the surveillance requirements.

Unit 1 - Amendment No. 101
Unit 2 - Amendment No. 100
April 14, 1995

3/4.9 REFUELING OPERATIONS

BASES

3/4.9.1 BORON CONCENTRATION

The limitations on reactivity conditions during REFUELING ensure that: (1) the reactor will remain subcritical during CORE ALTERATIONS, and (2) a uniform boron concentration is maintained for reactivity control in the water volume having direct access to the reactor vessel. These limitations are consistent with the initial conditions assumed for the boron dilution incident in the safety analysis.

3/4.9.2 INSTRUMENTATION

The OPERABILITY of the Source Range Neutron Flux Monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core. The use of one portable source range detector, in conjunction with an operable, permanently installed detector, is permitted for fuel movement, provided the LCO requirements regarding having two detectors OPERABLE, each with continuous visual indication in the control room and one with audible indication in containment and the control room, are met. If used, the portable detector shall be functionally equivalent to the permanently installed source range detectors and shall be positioned such that the combination of the remaining OPERABLE permanent source range detector and the temporary detector monitors the reactivity of the core alteration.

It is acceptable to individually latch all control rods and withdraw single control rods for performance of friction tests with only one OPERABLE permanent source range detector because the core is fully loaded and therefore will be neutronically coupled to the OPERABLE source range detector. Sufficient SHUTDOWN MARGIN exists to accommodate the most reactive withdrawn rod.

3/4.9.3 DECAY TIME ← DELETED

The minimum requirement for reactor subcriticality prior to movement of irradiated fuel assemblies in the reactor vessel ensures that sufficient time has elapsed to allow the radioactive decay of the short lived fission products. This decay time is consistent with the assumptions used in the safety analyses.

3/4.9.4 CONTAINMENT PENETRATIONS

The requirements on containment penetration closure and OPERABILITY ensure that a release of radioactive material within containment will be restricted from leakage to the environment. The OPERABILITY and closure restrictions are sufficient to restrict radioactive material release from a fuel element rupture based upon the lack of containment pressurization potential while in the REFUELING MODE.

3/4.9.5 COMMUNICATIONS ← DELETED

The requirement for communications capability ensures that refueling station personnel can be promptly informed of significant changes in the facility status or core reactivity conditions during CORE ALTERATIONS.

3/4.9.6 MANIPULATOR CRANE ← DELETED

The OPERABILITY requirements for the manipulator cranes ensure that: (1) manipulator cranes will be used for movement of control rods and fuel assemblies, (2) each crane has sufficient load capacity to lift a control rod or fuel assembly, and (3) the core internals and reactor vessel are protected from excessive lifting force in the event they are inadvertently engaged during lifting operations.

3/4.9.7 CRANE TRAVEL - FUEL HANDLING BUILDING ← DELETED

The restriction on movement of loads in excess of the nominal weight of a fuel and control assembly and associated handling tool, except the movable fuel handling building walls, over other fuel assemblies in the spent fuel pool ensures that in the event this load is dropped: (1) the activity release will be limited to that contained in a single fuel assembly, and (2) any possible distortion of the fuel in the storage racks will not result in a critical array. This assumption is consistent with the activity release assumed in the safety analyses. The movable fuel handling building walls travel on rollers over the spent fuel pool and have been designed to remain in place during postulated seismic events.

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

The requirement that at least one residual heat removal (RHR) train be in operation ensures that: (1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor vessel below 140°F as required during the REFUELING MODE and (2) sufficient coolant circulation is maintained through the reactor core to minimize the effects of a boron dilution incident and prevent boron stratification. The requirement to maintain a 3000 gpm flowrate with the reactor subcritical less than 57 hours ensures that there is adequate decay heat removal capability. After the reactor is subcritical for 57 hours, the flowrate can be reduced to 1300 gpm and meet the decay heat removal requirements. The reduced flowrate provides additional margin to vortexing at the RHR pump suction while in partial drain operation.

The requirement to have two RHR trains OPERABLE when there is less than 23 feet of water above the reactor vessel flange ensures that a single failure of the operating RHR train will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and 23 feet of water above the reactor vessel flange, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR train, adequate time is provided to initiate emergency procedures to cool the core.

3/4.9.9 CONTAINMENT VENTILATION ISOLATION SYSTEM

The OPERABILITY of this system ensures that the containment ventilation penetrations will be automatically isolated upon detection of high radiation levels within the containment. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

3/4.9.10 and 3/4.9.11 WATER LEVEL - REACTOR VESSEL and SPENT FUEL POOL

The restrictions on minimum water level ensure that sufficient water depth is available to remove 99% of the assumed 10% iodine gap activity released from the rupture of an irradiated fuel assembly. The minimum water depth is consistent with the assumptions of the safety analysis.

The minimum water level for movement of fuel assemblies (23 feet above the vessel flange) assures that sufficient water depth is maintained above fuel elements being moved to or from the vessel. With the upper internals in place, fuel assemblies and control rods cannot be removed from the vessel. Operations involving the unlatching of control rods with the vessel upper internals in place may proceed with less than 23 feet of water above the vessel flange provided that 23 feet of water (12 feet above the flange) is maintained above all irradiated fuel assemblies within the reactor vessel.

3/4.9.12 FUEL HANDLING BUILDING VENTILATION SYSTEM

The limitations on the Fuel Handling Building Ventilation System ensure that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the safety analyses. Transfer of system operation into the iodine removal mode (exhaust through HEPA filters and charcoal adsorbers) is initiated automatically by either the new fuel storage or spent fuel pool area radiation monitors required by Specification 3.3.3. Following installation of the Fuel Handling Building Ventilation exhaust radiation monitors, the automatic function of the fuel storage area monitors will be removed. Transfer of system operation into the iodine removal mode will be by either of the two Fuel Handling Building Ventilation exhaust radiation monitors required by Specification 3.3.3. ANSI N510-1980 will be used as a procedural guide for surveillance testing.

3/4.9.13 SPENT FUEL SHIPPING CASK MOVEMENT ← DELETED

The restriction on spent fuel shipping cask movement ensures that no fuel assemblies will be ruptured in the event of a spent fuel shipping cask accident. The dose consequences of this accident are within the dose guideline values of 10 CFR Part 100.

3/4.9.14 SPENT FUEL ASSEMBLY STORAGE

The restrictions placed on spent fuel assemblies stored in the spent fuel pool ensure that k-eff will not be greater than 0.95 under normal conditions, as discussed in TS 5.6.1.a. The requirement for 2000 ppm boron concentration ensures that k-eff will not be greater than 0.95 under accident conditions. The spent fuel storage has been designed and analyzed for a maximum enrichment of 5.0 weight percent U-235.

Unit 1 - Amendment No. 104
Unit 2 - Amendment No. 103
July 7, 1995

3/4.10 SPECIAL TEST EXCEPTIONS

BASES

3/4.10.1 SHUTDOWN MARGIN ← DELETED

This special test exception provides that a minimum amount of control rod worth is immediately available for reactivity control when tests are performed for control rod worth measurement. This special test exception is required to permit the periodic verification of the actual versus predicted core reactivity condition occurring as a result of fuel burnup or fuel cycling operations.

3/4.10.2 GROUP HEIGHT, INSERTION, AND POWER DISTRIBUTION LIMITS

This special test exception permits individual control rods to be positioned outside of their normal group heights and insertion limits during the performance of such PHYSICS TESTS as those required to: (1) measure control rod worth and (2) determine the reactor stability index and damping factor under xenon oscillation conditions.

3/4.10.3 PHYSICS TESTS

This special test exception permits PHYSICS TESTS to be performed at less than or equal to 5% of RATED THERMAL POWER with the RCS T_{avg} slightly lower than normally allowed so that the fundamental nuclear characteristics of the reactor core and related instrumentation can be verified. In order for various characteristics to be accurately measured, it is, at times, necessary to operate outside the normal restrictions of these Technical Specifications. For instance, to measure the Moderator Temperature Coefficient at BOL, it is necessary to position the various control rods at heights which may not normally be allowed by Specification 3.1.3.6 which may in turn, cause the RCS T_{avg} to fall slightly below the minimum temperature of Specification 3.1.1.4.

BASES

3/4.10.4 POSITION INDICATION SYSTEMS - SHUTDOWN ← DELETED

This special test exception permits the Position Indication Systems to be inoperable during rod drop time measurement. This exception is required since the data necessary to determine the rod drop time is derived from the induced voltage in the position indicator coils as the rod is dropped. This induced voltage is small compared to the normal voltage and therefore can not be observed if the Position Indication Systems remain OPERABLE.

3/4.11.1 LIQUID EFFLUENTS

3/4.11.1.1 Relocated to RMCP.
3/4.11.1.2 Relocated to RMCP.
3/4.11.1.3 Relocated to RMCP.

3/4.11.1.4 LIQUID HOLDUP TANKS — DELETED

The tanks listed in this specification include all those outdoor radwaste tanks that are not surrounded by liners, dikes or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System.

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting concentrations would be less than the limits of 10 CFR 20.1001 - 20.2401, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.1 Relcoated to RMCP.
3/4.11.2.2 Relocated to RMCP.
3/4.11.2.3 Relocated to RMCP.
3/4.11.2.4 Relocated to RMCP.

3/4.11.2.5 EXPLOSIVE GAS MIXTURE — DELETED

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the GASEOUS RADWASTE SYSTEM is maintained below the flammability limits of hydrogen and oxygen. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10 CFR Part 50.

3/4.11.2.6 GAS STORAGE TANKS — DELETED

The tanks included in this specification are those tanks for which the quantity of radioactivity contained is not limited directly or indirectly by another Technical Specification. Restricting the quantity of radioactivity contained in each gas storage tank provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting whole body exposure to a MEMBER OF THE PUBLIC at the nearest SITE BOUNDARY will not exceed 0.5 rem. This is consistent with Standard Review Plan 11.3, Branch Technical Position ETSB 11-5, "Postulated Radioactive Releases Due to a Waste Gas System Leak or Failure," in NUREG-0800, July 1981.

3/4.11.3 Deleted

3/4.11.4 Deleted

Amendment Nos. 85 and 84
January 6, 1994

PROCEDURES AND PROGRAMS (Continued)

h. Radiological Environmental Monitoring Program

2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and

3) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in the environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

i. Reactor Coolant Pump Flywheel Inspection

Inspect each reactor coolant pump flywheel in accordance with the recommendations of Regulatory Position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975.

INSERT A

Amendment Nos. 98 & 97
June 7, 1995

Insert A
Page 6-15c

j. Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the Waste Gas Holdup System, the quantity of radioactivity contained in gas storage tanks, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks. The gaseous radioactivity quantities shall be determined following the methodology in Branch Technical Position ETSB 11-5, "Postulated Radioactivity Release due to Waste Gas System Leak or Failure." The liquid radwaste quantities shall be determined in accordance with Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures."

The program shall include:

1) The limits for the concentrations of hydrogen and oxygen in the Waste Gas Holdup System and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion);

2) A surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank is less than the amount that would result in a whole body exposure of $\geq$ 0.5 rem to any individual in an UNRESTRICTED AREA, in the event of an uncontrolled release of the tanks' contents; and

3) A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System, is less than the amount that would result in concentrations less than the limits of 10 CFR 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA, in the event of an uncontrolled release of the tanks' contents.

The provisions of Specifications 4.0.2 and 4.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

PROPOSED TECHNICAL SPECIFICATION PAGES

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LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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BASES

BASES

BASES

3/4.1 REACTIVITY CONTROL SYSTEMS

3/4.1.1 BORATION CONTROL

SHUTDOWN MARGIN - T_{avg} GREATER THAN 200°F

LIMITING CONDITION FOR OPERATION

3.1.1.1 The SHUTDOWN MARGIN shall be greater than or equal to 1.6% Δk/k.

APPLICABILITY: MODES 1, 2*, 3, and 4.

ACTION:

With the SHUTDOWN MARGIN less than 1.6% Δk/k, immediately initiate and continue boration at greater than or equal to 30 gpm of a solution containing greater than or equal to 7,000 ppm boron or equivalent until the required SHUTDOWN MARGIN is restored.

SURVEILLANCE REQUIREMENTS

4.1.1.1.1 The SHUTDOWN MARGIN shall be determined to be greater than or equal to 1.6% Δk/k:

a. Within 1 hour after detection of an inoperable control rod(s) and at least once per 12 hours thereafter while the rod(s) is inoperable. If the inoperable control rod is immovable or untrippable, the above required SHUTDOWN MARGIN shall be verified acceptable with an increased allowance for the withdrawn worth of the immovable or untrippable control rod(s);

b. When in MODES 1 or 2 with K_{eff} greater than or equal to 1, at least once per 12 hours by verifying that control bank withdrawal is within the limits of Specification 3.1.3.6;

c. When in MODE 2 with K_{eff} less than 1, within 4 hours prior to achieving reactor criticality by verifying that the predicted critical control rod position is within the limits of Specification 3.1.3.6;

d. Prior to initial operation above 5% RATED THERMAL POWER after each fuel loading, by consideration of the factors of Specification 4.1.1.1.1e., below, with the control banks at the maximum insertion limit of Specification 3.1.3.6; and

*See Special Test Exceptions in the Final Safety Analysis Report.

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REACTIVITY CONTROL SYSTEMS

POSITION INDICATION SYSTEM - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.1.3.3 One digital rod position indicator (excluding demand position indication) shall be OPERABLE and capable of determining the control rod position within ± 12 steps for each shutdown or control rod not fully inserted.

APPLICABILITY: MODES 3*#, 4*# and 5*#.

ACTION:

With less than the above required position indicator(s) OPERABLE, immediately open the Reactor Trip System breakers.

SURVEILLANCE REQUIREMENTS

4.1.3.3 Each of the above required digital rod position indicator(s) shall be determined to be OPERABLE by verifying that the digital rod position indicators agree with the demand position indicators within 12 steps when exercised over the full range of rod travel at least once per 18 months.

*With the Reactor Trip System breakers in the closed position.

#See Special Test Exceptions in the Final Safety Analysis Report.

SURVEILLANCE REQUIREMENTS

4.2.4.1 The QUADRANT POWER TILT RATIO shall be determined to be within the limit above 50% of RATED THERMAL POWER by:

a. Calculating the ratio at least once per 7 days when the alarm is OPERABLE, and

b. Calculating the ratio at least once per 12 hours during steady-state operation when the alarm is inoperable.

4.2.4.2 The QUADRANT POWER TILT RATIO shall be determined to be within the limit when above 75% of RATED THERMAL POWER with one Power Range channel inoperable by using the movable incore detectors to confirm that the normalized symmetric power distribution, obtained from the 4 pairs of symmetric thimble locations or from a full incore flux map per the Final Safety Analysis Report, is consistent with the indicated QUADRANT POWER TILT RATIO at least once per 12 hours.

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3/4.11 Deleted in its entirety

3/4.1.1.4 MINIMUM TEMPERATURE FOR CRITICALITY

This specification ensures that the reactor will not be made critical with the Reactor Coolant System average temperature less than 541°F. This limitation is required to ensure: (1) the moderator temperature coefficient is within its analyzed temperature range, (2) the protective instrumentation is within its normal operating range, (3) the pressurizer is capable of being in an OPERABLE status with a steam bubble, and (4) the reactor vessel is above its minimum RT_{NDT} temperature.

3/4.1.2 DELETED

3/4.1.3 MOVABLE CONTROL ASSEMBLIES

The specifications of this section ensure that: (1) acceptable power distribution limits are maintained, (2) the minimum SHUTDOWN MARGIN is maintained, and (3) the potential effects of rod misalignment on associated accident analyses are limited. OPERABILITY of the control rod position indicators is required to determine control rod positions and thereby ensure compliance with the control rod alignment and insertion limits. Group demand position can be determined from: (1) the group step counters, or (2) the plant computer, or (3) for control rods, the P to A converter at the rod control cabinet.

The ACTION statements which permit limited variations from the basic requirements are accompanied by additional restrictions which ensure that the original design criteria are met. Continued operation of the Rod Control system is allowed with multiple immovable rods, that are still trippable and within alignment, for periods up to 72 hours to allow maintenance and/or testing of the Rod Control system (additional information is included in Attachment C of the Westinghouse letter to the NRC on Movable Assemblies, December 21, 1984.) Misalignment of a rod requires measurement of peaking factors and a restriction in THERMAL POWER. These restrictions provide assurance of fuel rod integrity during continued operation. In addition, those accident analyses affected by a misaligned rod are reevaluated to confirm that the results remain valid during future operation.

The maximum rod drop time restriction is consistent with the assumed rod drop time used in the safety analyses. Measurement with T_{avg} greater than or equal to 541°F and with all reactor coolant pumps operating ensures that the measured drop times will be representative of insertion times experienced during a Reactor trip at operating conditions.

Control rod positions and OPERABILITY of the rod position indicators are required to be verified on a nominal basis of once per 12 hours with more frequent verifications required if an automatic monitoring channel is inoperable. These verification frequencies are adequate for assuring that the applicable LCO's are satisfied.

REACTOR PROTECTION SYSTEM and ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (Continued)

The Engineered Safety Features Actuation System interlocks perform the following functions:

P-4 Reactor tripped - Actuates Turbine trip, closes main feedwater valves on T_{avg} below Setpoint, prevents the opening of the main feedwater valves which were closed by a Safety Injection or High Steam Generator Water Level signal, allows Safety Injection block so that components can be reset or tripped.

Reactor not tripped - prevents manual block of Safety Injection.

P-11 On increasing pressurizer pressure, P-11 automatically reinstates Safety Injection actuation on low pressurizer pressure and low steam line pressure and blocks steam line isolation on steam line pressure negative rate - high. If Safety Injection on low steam line pressure is manually enabled, P-11 will automatically block steam line isolation on steam line pressure negative rate - high. On decreasing pressurizer pressure, P-11 permits the manual block of safety injection on low pressurizer pressure and low steam line pressure and automatically enables steam line isolation on steam line pressure negative rate - high.

3/4.3.3 MONITORING INSTRUMENTATION

3/4.3.3.1 RADIATION MONITORING FOR PLANT OPERATIONS

The OPERABILITY of the radiation monitoring channels ensures that: (1) the radiation levels are continually measured in the areas served by the individual channels and (2) the alarm or automatic action is initiated when the radiation level trip setpoint is exceeded.

3/4.3.3.2 DELETED

3/4.3.3.3 SEISMIC INSTRUMENTATION

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility to determine if plant shutdown is required pursuant to Appendix A of 10 CFR Part 100. The instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes."

3/4.3.3.4 DELETED

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

BACKGROUND

The Remote Shutdown Instrumentation and Controls provide the control room operator with sufficient instrumentation and controls to place and maintain the unit in a safe shutdown condition from a location other than the control room. This capability is necessary to protect against the possibility that the control room becomes inaccessible. A safe shutdown condition is defined as MODE 3. With the unit in MODE 3, the Auxiliary Feedwater (AFW) System and the steam generator (SG) safety valves can be used to remove core decay heat and meet all safety requirements. The long term supply of water for the AFW System allows extended operation in MODE 3 from outside the control room until such a time that either control is transferred back to the control room or a cooldown is initiated.

In the event that the control room becomes inaccessible, the operators can establish control at the remote shutdown panel (hot shutdown panel), and place and maintain the unit in MODE 3. Not all controls and necessary transfer switches are located at the hot shutdown panel. Some controls and transfer switches will have to be operated locally at the switchgear, motor control panels, or other local stations. The unit automatically reaches MODE 3 following a unit shutdown and can be maintained safely in MODE 3 for an extended period of time.

The OPERABILITY of the remote shutdown control and instrumentation functions ensures there is sufficient information available on selected unit parameters to place and maintain the unit in MODE 3 should the control room become inaccessible.

3/4.3.3.10 DELETED

3/4.3.4 TURBINE OVERSPEED PROTECTION

This specification is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety related components, equipment or structures.

The quarterly valve test frequency required by Specification 4.3.4.1.2a, is based on Diablo Canyon operating experience and the results of an evaluation documented in WCAP-11525, "Probabilistic Evaluation of Reduction in Turbine Valve Test Frequency," June 1987. The evaluation shows that for Diablo Canyon the probability of turbine missile generation is within the NRC acceptance criteria (letter from C. E. Rossi, USNRC, to J. A. Martin, Westinghouse, dated February 2, 1987) for turbine valve test intervals up to seven months.

3/4.5.5 REFUELING WATER STORAGE TANK (Continued)

APPLICABILITY

In MODES 1, 2, 3, and 4, RWST OPERABILITY requirements are dictated by ECCS and CS System OPERABILITY requirements. Since the ECCS and CS System must be OPERABLE in MODES 1, 2, 3, and 4, the RWST must also be OPERABLE to support their operation. In MODES 5 and 6, RWST OPERABILITY requirements are dictated by reactivity control requirements in the Final Safety Analysis Report.

ACTIONS

With RWST boron concentration not within limits, the boron concentration must be returned to within limits within 8 hours. Under these conditions, the ECCS and the CS System are not fully qualified to perform their design function. The 8-hour limit to restore boron concentration to within limits was developed considering the time required to change the boron concentration and the fact that the contents of the tank are still available for injection.

With the RWST inoperable for reasons other than boron concentration, it must be restored to OPERABLE status within 1 hour. In this condition, sufficient water is not available in the RWST to assure core recovery and adequate sump volume for recirculation. Therefore, prompt action must be taken to restore the tank to OPERABLE status or to place the plant in a MODE in which the requirements for the RWST are less restrictive.

If the RWST cannot be returned to OPERABLE status within the associated Action Time, the plant must be brought to a MODE in which the LCO for the RWST is less restrictive. To achieve this status, the plant must be brought to at least Hot Standby (Mode 3) within 6 hours and to Cold Shutdown (Mode 5) within the following 30 hours. Based on operating experience, the allowed Action Times are reasonable to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE REQUIREMENTS

Surveillance of the RWST ensures that an adequate supply of borated water is available to cool and depressurize the containment in the event of a DBA, to cool and cover the core in the event of a LOCA, to maintain the reactor subcritical following a DBA, to ensure adequate borated water level in the containment sump to support RHR pump operation in the recirculation mode, and to provide an alternate borated water source for reactivity control.

To be considered OPERABLE, the RWST must meet the water volume and boron concentration established in the surveillance requirements.

3/4.9 REFUELING OPERATIONS

BASES

3/4.9.1 BORON CONCENTRATION

The limitations on reactivity conditions during REFUELING ensure that: (1) the reactor will remain subcritical during CORE ALTERATIONS, and (2) a uniform boron concentration is maintained for reactivity control in the water volume having direct access to the reactor vessel. These limitations are consistent with the initial conditions assumed for the boron dilution incident in the safety analysis.

3/4.9.2 INSTRUMENTATION

The OPERABILITY of the Source Range Neutron Flux Monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core. The use of one portable source range detector, in conjunction with an operable, permanently installed detector, is permitted for fuel movement, provided the LCO requirements regarding having two detectors OPERABLE, each with continuous visual indication in the control room and one with audible indication in containment and the control room, are met. If used, the portable detector shall be functionally equivalent to the permanently installed source range detectors and shall be positioned such that the combination of the remaining OPERABLE permanent source range detector and the temporary detector monitors the reactivity of the core alteration.

It is acceptable to individually latch all control rods and withdraw single control rods for performance of friction tests with only one OPERABLE permanent source range detector because the core is fully loaded and therefore will be neutronically coupled to the OPERABLE source range detector. Sufficient SHUTDOWN MARGIN exists to accommodate the most reactive withdrawn rod.

3/4.9.3 DELETED

3/4.9.4 CONTAINMENT PENETRATIONS

The requirements on containment penetration closure and OPERABILITY ensure that a release of radioactive material within containment will be restricted from leakage to the environment. The OPERABILITY and closure restrictions are sufficient to restrict radioactive material release from a fuel element rupture based upon the lack of containment pressurization potential while in the REFUELING MODE.

3/4.9.5 DELETED

3/4.9.6 DELETED

3/4.9.7 DELETED

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

The requirement that at least one residual heat removal (RHR) train be in operation ensures that: (1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor vessel below 140°F as required during the REFUELING MODE and (2) sufficient coolant circulation is maintained through the reactor core to minimize the effects of a boron dilution incident and prevent boron stratification. The requirement to maintain a 3000 gpm flowrate with the reactor subcritical less than 57 hours ensures that there is adequate decay heat removal capability. After the reactor is subcritical for 57 hours, the flowrate can be reduced to 1300 gpm and meet the decay heat removal requirements. The reduced flowrate provides additional margin to vortexing at the RHR pump suction while in partial drain operation.

The requirement to have two RHR trains OPERABLE when there is less than 23 feet of water above the reactor vessel flange ensures that a single failure of the operating RHR train will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and 23 feet of water above the reactor vessel flange, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR train, adequate time is provided to initiate emergency procedures to cool the core.

3/4.9.9 CONTAINMENT VENTILATION ISOLATION SYSTEM

The OPERABILITY of this system ensures that the containment ventilation penetrations will be automatically isolated upon detection of high radiation levels within the containment. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

3/4.9.10 and 3/4.9.11 WATER LEVEL - REACTOR VESSEL and SPENT FUEL POOL

The restrictions on minimum water level ensure that sufficient water depth is available to remove 99% of the assumed 10% iodine gap activity released from the rupture of an irradiated fuel assembly. The minimum water depth is consistent with the assumptions of the safety analysis.

The minimum water level for movement of fuel assemblies (23 feet above the vessel flange) assures that sufficient water depth is maintained above fuel elements being moved to or from the vessel. With the upper internals in place, fuel assemblies and control rods cannot be removed from the vessel. Operations involving the unlatching of control rods with the vessel upper internals in place may proceed with less than 23 feet of water above the vessel flange provided that 23 feet of water (12 feet above the flange) is maintained above all irradiated fuel assemblies within the reactor vessel.

3/4.9.12 FUEL HANDLING BUILDING VENTILATION SYSTEM

The limitations on the Fuel Handling Building Ventilation System ensure that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the safety analyses. Transfer of system operation into the iodine removal mode (exhaust through HEPA filters and charcoal adsorbers) is initiated automatically by either the new fuel storage or spent fuel pool area radiation monitors required by Specification 3.3.3. Following installation of the Fuel Handling Building Ventilation exhaust radiation monitors, the automatic function of the fuel storage area monitors will be removed. Transfer of system operation into the iodine removal mode will be by either of the two Fuel Handling Building Ventilation exhaust radiation monitors required by Specification 3.3.3. ANSI N510-1980 will be used as a procedural guide for surveillance testing.

3/4.9.13 DELETED

3/4.9.14 SPENT FUEL ASSEMBLY STORAGE

The restrictions placed on spent fuel assemblies stored in the spent fuel pool ensure that k-eff will not be greater than 0.95 under normal conditions, as discussed in TS 5.6.1.a. The requirement for 2000 ppm boron concentration ensures that k-eff will not be greater than 0.95 under accident conditions. The spent fuel storage has been designed and analyzed for a maximum enrichment of 5.0 weight percent U-235.

3/4.10 SPECIAL TEST EXCEPTIONS

BASES

3/4.10.1 DELETED

3/4.10.2 GROUP HEIGHT, INSERTION, AND POWER DISTRIBUTION LIMITS

This special test exception permits individual control rods to be positioned outside of their normal group heights and insertion limits during the performance of such PHYSICS TESTS as those required to: (1) measure control rod worth and (2) determine the reactor stability index and damping factor under xenon oscillation conditions.

3/4.10.3 PHYSICS TESTS

This special test exception permits PHYSICS TESTS to be performed at less than or equal to 5% of RATED THERMAL POWER with the RCS T_{avg} slightly lower than normally allowed so that the fundamental nuclear characteristics of the reactor core and related instrumentation can be verified. In order for various characteristics to be accurately measured, it is, at times, necessary to operate outside the normal restrictions of these Technical Specifications. For instance, to measure the Moderator Temperature Coefficient at BOL, it is necessary to position the various control rods at heights which may not normally be allowed by Specification 3.1.3.6 which may in turn, cause the RCS T_{avg} to fall slightly below the minimum temperature of Specification 3.1.1.4.

3/4.10.4 DELETED

3/4.11.1 LIQUID EFFLUENTS

3/4.11.1.1 Relocated to RMCP.
3/4.11.1.2 Relocated to RMCP.
3/4.11.1.3 Relocated to RMCP.

3/4.11.1.4 DELETED

3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.1 Relcoated to RMCP.
3/4.11.2.2 Relocated to RMCP.
3/4.11.2.3 Relocated to RMCP.
3/4.11.2.4 Relocated to RMCP.

3/4.11.2.5 DELETED

3/4.11.2.6 DELETED

3/4.11.3 DELETED

3/4.11.4 DELETED

*PROCEDURES AND PROGRAMS (Continued)

h. Radiological Environmental Monitoring Program

2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and

3) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in the environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

i. Reactor Coolant Pump Flywheel Inspection

Inspect each reactor coolant pump flywheel in accordance with the recommendations of Regulatory Position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975.

j. Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the Waste Gas Holdup System, the quantity of radioactivity contained in unprotected outdoor liquid storage tanks, and the quantity of radioactivity contained in gas storage tanks. The gaseous radioactivity quantities shall be determined following the methodology in Branch Technical Position ETSB 11-5, "Postulated Radioactivity Release due to Waste Gas System Leak or Failure." The liquid radwaste quantities shall be determined in accordance with Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures."

The program shall include:

1) The limits for the concentrations of hydrogen and oxygen in the Waste Gas Holdup System and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion);

2) A surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank is less than the amount that would result in a whole body exposure of $\geq$ 0.5 rem to any individual in an UNRESTRICTED AREA, in the event of an uncontrolled release of the tanks' contents; and

3) A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System, is less than the amount that would result in concentrations less than the limits of 10 CFR 20, Appendix B,

PROCEDURES AND PROGRAMS (Continued)

Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA, in the event of an uncontrolled release of the tanks' contents.

The provisions of Specifications 4.0.2 and 4.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

SCREENING FORMS FOR TS TO BE RELOCATED

Screening Forms for the following TS are attached:

Reactivity Control Systems

3.1.2.1 Boration Systems Flow Path - Shutdown
3.1.2.3 Charging Pumps - Shutdown
3.1.2.4 Charging Pumps - Operating
3.1.2.5 Borated Water Source - Shutdown
3.1.2.6 Borated Water Sources - Operating

Instrumentation

3.3.3.2 Movable Incore Detectors
3.3.3.4 Meteorological Instrumentation
3.3.3.10 Explosive Gas Effluent Monitoring Instrumentation

Refueling Operations

3.9.3 Decay Time
3.9.5 Communications
3.9.6 Manipulator Crane
3.9.7 Crane Travel - Fuel Handling Building
3.9.10.2 Water Level - Reactor Vessel (Control Rods)
3.9.13 Spent Fuel Shipping Cask Movement

Special Test Exceptions

3.10.1 Special Test Exceptions - Shutdown Margin
3.10.4 Position Indication System - Shutdown

Radioactive Effluents

3.11.1.4 Liquid Holdup Tanks
3.11.2.5 Explosive Gas Mixture
3.11.2.6 Gas Storage Tanks

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.1.2.1 BORATION FLOW PATHS - SHUTDOWN

Applicable Modes: Modes 5 and 6

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the Technical Specification (TS) shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The Bases for this limiting condition for operation (LCO) state that the purpose is to assure negative reactivity control is available during each mode of facility operation.

The boration subsystem of the chemical and volume control system (CVCS) provides the means to meet one of the functional requirements of the CVCS, i.e., to control the chemical neutron absorber (boron) concentration in the RCS and to help control the boron concentration to maintain shutdown margin (SDM). To accomplish this functional requirement, the boration systems TS require a source of borated water, one or more flow paths to inject this borated water into the reactor coolant system (RCS), and appropriate charging pumps to provide the necessary charging head.

The boration subsystem is not assumed to operate to mitigate the consequences of a DBA or transient. In the case of a malfunction of the CVCS, which causes a boron dilution event; the response, or that required by the operator, is to close the appropriate valves in the reactor makeup system before the SDM is lost. Operation of the boration subsystem is not assumed to mitigate this event. Furthermore, Ref. 3 notes that the normal capability to control reactivity with boron is not credited in the accident analysis. SDM requirements provide sufficient reactivity margin to ensure that acceptable fuel design limits will not be exceeded for normal shutdown and anticipated operational occurrences. The SDM defines the degree of subcriticality that would be obtained immediately following the insertion or scram of all shutdown and control rods, assuming that the single rod assembly of highest worth is fully withdrawn. When the unit is in the shutdown and refueling modes, the SDM requirements are met by means of adjustments to the RCS boron concentration.

Based on the foregoing, the boration subsystem is not installed instrumentation that is used to detect or indicate a significant degradation of the reactor coolant pressure boundary (RCPB); therefore, this TS does not satisfy criterion 1.

The boration subsystem TS is not associated with a process variable, design feature, or operating restriction that is an initial condition of an event that assumes failure of or challenges the integrity of a fission product barrier. Therefore, the boration subsystem TS does not satisfy criterion 2.

For these events, the primary success path for mitigation includes isolating the dilution flowpath. The subsequent actuation of equipment to establish a boron injection flowpath is intended to regain the required SDM. This is desirable, but beyond the scope of a primary success path action. The boration subsystem TS does not apply to a system that is part of the primary success path, and which functions to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; therefore, the TS does not satisfy criterion 3.

The boration flow paths at shutdown are not modeled in the Diablo Canyon Power Plant (DCPP) Individual Plant Examination (IPE), as the IPE only considers power operation (Mode 1). However, there is no indication that this function would be identified as risk significant if it was modeled in probabilistic risk assessment (PRA) models. Therefore, this TS does not satisfy criterion 4.

(4) **CONCLUSION**

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.1.2.3 CHARGING PUMPS - SHUTDOWN

Applicable Modes: Modes 5 and 6

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The Bases for this LCO state that the purpose is to assure negative reactivity control is available during each mode of facility operation. Equipment required to perform this function includes: (1) borated water

sources, (2) charging pumps, (3) separate flow paths, (4) boric acid transfer pumps, and (5) an emergency power source from operable diesel generators.

The boration subsystem is not assumed to operate to mitigate the consequences of a DBA or transient. In the case of a malfunction of the CVCS, which causes a boron dilution event; the response, or that required by the operator, is to close the appropriate valves in the reactor makeup system before the SDM is lost. Operation of the boration subsystem is not assumed to mitigate this event. Furthermore, Ref. 3 notes that the normal capability to control reactivity with boron is not credited in the accident analysis. SDM requirements provide sufficient reactivity margin to ensure that acceptable fuel design limits will not be exceeded for normal shutdown and anticipated operational occurrences. The SDM defines the degree of subcriticality that would be obtained immediately following the insertion or scram of all shutdown and control rods, assuming that the single rod assembly of highest worth is fully withdrawn. When the unit is in the shutdown and refueling modes, the SDM requirements are met by means of adjustments to the RCS boron concentration.

The boration subsystem TS is not applicable to installed instrumentation used to detect or indicate a significant degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The boration subsystem TS is not associated with a process variable, design feature, or operating restriction that is an initial condition of an event that assumes failure of or challenges the integrity of a fission product barrier. Therefore, the boration subsystem TS does not satisfy criterion 2.

For these events, the primary success path for mitigation includes isolating the dilution flowpath. The subsequent actuation of equipment to establish a boron injection flowpath is intended to regain the required SDM. This is desirable, but beyond the scope of a primary success path action. The boration subsystem TS does not apply to a SSC that is part of the primary success path and which functions to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; therefore, the TS does not satisfy criterion 3.

The charging pumps at shutdown are not modeled in the DCPP IPE, as the IPE only considers power operation (Mode 1). However, there is no indication that this function would be identified as risk significant if it

was modeled in PRA models. Therefore, this TS does not satisfy criterion 4.

(4) **CONCLUSION**

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) **TECHNICAL SPECIFICATION** 3.1.2.4 CHARGING PUMPS - OPERATING

Applicable Modes: Modes 1, 2, 3 and 4#

(# a maximum of one centrifugal charging pump shall be OPERABLE whenever the temperature of one or more of the RCS cold legs is less than or equal to 270°F).

(2) **EVALUATION OF POLICY STATEMENT CRITERIA**

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The Bases for this LCO state that the purpose is to assure negative reactivity control is available during each mode of facility operation. The equipment required to perform this function includes: (1) borated water sources, (2) charging pumps, (3) separate flow paths, (4) boric acid transfer pumps, and (5) an emergency power supply from operable diesel generators.

The boration subsystem of the CVCS provides the means to meet one of the functional requirements of the CVCS, i.e., to control the chemical neutron absorber (boron) concentration in the RCS and to help control the boron concentration to maintain SDM. To accomplish this functional requirement, the boration systems TS require a source of borated water, one or more flow paths to inject this borated water into the RCS, and appropriate charging pumps to provide the necessary charging head.

The boration subsystem is not assumed to operate to mitigate the consequences of a DBA or transient. In the case of a malfunction of the CVCS, which causes a boron dilution event; the response, or that required by the operator, is to close the appropriate valves in the reactor makeup system before the SDM is lost. Operation of the boration subsystem is not assumed to mitigate this event. Furthermore, Ref. 3 notes that the normal capability to control reactivity with boron is not credited in the accident analysis. SDM requirements provide sufficient reactivity margin to ensure that acceptable fuel design limits will not be exceeded for normal shutdown and anticipated operational occurrences. The SDM defines the degree of subcriticality that would be obtained immediately following the insertion or scram of all shutdown and control rods, assuming that the single rod assembly of highest worth is fully withdrawn. When the unit is in the shutdown and refueling modes, the SDM requirements are met by means of adjustments to the RCS boron concentration.

Based on the foregoing, the boration subsystem is not installed instrumentation that is used to detect or indicate a significant degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The boration subsystem TS is not associated with a process variable, design feature, or operating restriction that is an initial condition of an event that assumes failure of or challenges the integrity of a fission product barrier. Therefore, the boration subsystem TS does not satisfy criterion 2.

For these events, the primary success path for mitigation includes isolating the dilution flowpath. The subsequent actuation of equipment to establish a boron injection flowpath is intended to regain the required SDM. This is desirable, but beyond the scope of a primary success path action. The boration subsystem TS does not apply to a system that is part of the primary success path, and which functions to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; therefore, the TS does not satisfy criterion 3. Ref. 3 also notes that operability of the charging pumps, the refueling water storage tank (RWST) and associated flowpaths is required as part of the emergency core cooling system (ECCS) TS.

For the main steamline break (MSLB) event, the sequence of events takes the plant to cold shutdown conditions and; therefore, boration of the RCS is necessary. However, the boration flowpath in this case is required as part of the ECCS function.

The ECCS function of the charging pumps is explicitly modeled in the DCPP IPE; this function is being retained in the DCPP ECCS TS. The boration function of the charging pumps is not explicitly modeled in the DCPP PRA; however, the boration function in response to anticipated transient without scram (ATWS) events is considered. The ATWS contribution to core damage is small, less than 1E-6. Thus, it can be concluded that this TS does not satisfy criterion 4.

(4) **CONCLUSION**

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.1.2.5 BORATED WATER SOURCE - SHUTDOWN

Applicable Modes: Modes 5 and 6

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The Bases for this LCO state that the purpose is to assure negative reactivity control is available during each mode of facility operation. Equipment required to perform this function includes, depending on

operating conditions, a combination of: (1) borated water sources, (2) charging pumps, (3) separate flow paths, (4) boric acid transfer pumps, and (5) an emergency power source from operable diesel generators.

The boration subsystem of the CVCS provides the means to meet one of the functional requirements of the CVCS, i.e., to control the chemical neutron absorber (boron) concentration in the RCS and to help control the boron concentration to SDM. To accomplish this functional requirement, the boration systems TS require a source of borated water, one or more flow paths to inject this borated water into the RCS, and appropriate charging pumps to provide the necessary charging head.

The boration subsystem is not assumed to operate to mitigate the consequences of a DBA or transient. In the case of a malfunction of the CVCS, which causes a boron dilution event; the response, or that required by the operator, is to close the appropriate valves in the reactor makeup system before the SDM is lost. Operation of the boration subsystem is not assumed to mitigate this event. Furthermore, Ref. 3 notes that the normal capability to control reactivity with boron is not credited in the accident analysis. SDM requirements provide sufficient reactivity margin to ensure that acceptable fuel design limits will not be exceeded for normal shutdown and anticipated operational occurrences. The SDM defines the degree of subcriticality that would be obtained immediately following the insertion or scram of all shutdown and control rods, assuming that the single rod assembly of highest worth is fully withdrawn. When the unit is in the shutdown and refueling modes, the SDM requirements are met by means of adjustments to the RCS boron concentration.

The boration subsystem TS is not applicable to installed instrumentation used to detect or indicate a significant degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The boration subsystem TS is not associated with a process variable, design feature, or operating restriction that is an initial condition of an event that assumes failure of or challenges the integrity of a fission product barrier. Therefore, the boration subsystem TS does not satisfy criterion 2.

For these events, the primary success path for mitigation includes isolating the dilution flowpath. The subsequent actuation of equipment to establish a boron injection flowpath is intended to regain the required SDM. This is desirable, but beyond the scope of a primary success path action. The boration subsystem TS does not apply to a system

that is part of the primary success path, and which functions to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; therefore, the TS does not satisfy criterion 3.

The borated water sources at shutdown are not modeled in the DCPP IPE, as the IPE only considers power operation (Mode 1). However, there is no indication that this function would be identified as risk significant if it was modeled in PRA models. Therefore, this TS does not satisfy criterion 4.

(4) CONCLUSION

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.1.2.6 BORATED WATER SOURCES - OPERATING

Applicable Modes: Modes 1, 2, 3, and 4

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The Bases for this LCO state that the purpose is to assure negative reactivity control is available during each mode of facility operation. The equipment required to perform this function includes, depending

upon operating conditions, combinations of: (1) borated water sources, (2) charging pumps, (3) separate flow paths, (4) boric acid transfer pumps, and (5) an emergency power supply from operable diesel generators.

The boration subsystem of the CVCS provides the means to meet one of the functional requirements of the CVCS, i.e., to control the chemical neutron absorber (boron) concentration in the RCS and to help control the boron concentration to maintain SDM. To accomplish this functional requirement, the boration systems TS require a source of borated water, one or more flow paths to inject this borated water into the RCS, and appropriate charging pumps to provide the necessary charging head.

The boration subsystem is not assumed to operate to mitigate the consequences of a DBA or transient. In the case of a malfunction of the CVCS, which causes a boron dilution event; the response, or that required by the operator, is to close the appropriate valves in the reactor makeup system before the SDM is lost. Operation of the boration subsystem is not assumed to mitigate this event. Furthermore, Ref. 3 notes that the normal capability to control reactivity with boron is not credited in the accident analysis. SDM requirements provide sufficient reactivity margin to ensure that acceptable fuel design limits will not be exceeded for normal shutdown and anticipated operational occurrences. The SDM defines the degree of subcriticality that would be obtained immediately following the insertion or scram of all shutdown and control rods, assuming that the single rod assembly of highest worth is fully withdrawn. During power operation, SDM control is ensured by operating with the shutdown banks fully withdrawn and the control banks within the limits of LCOs 3.1.3.5 and 3.1.3.6, for rod insertion.

Based on the foregoing, the boration subsystem TS is not applicable to installed instrumentation used to detect or indicate a significant degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The boration subsystem TS is not associated with a process variable, design feature, or operating restriction that is an initial condition of an event that assumes failure of or challenges the integrity of a fission product barrier. Therefore, the boration subsystem is not a design feature required to be operable to mitigate these events, and this TS does not satisfy criterion 2.

For these events, the primary success path for mitigation includes isolating the dilution flowpath. The subsequent actuation of equipment

to establish a boron injection flowpath is intended to regain the required SDM. This is desirable, but beyond the scope of a primary success path action. The boration subsystem TS does not apply to a system that is part of the primary success path, and which functions to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; therefore, the TS does not satisfy criterion 3. Ref. 3 also notes that operability of the charging pumps, the RWST and associated flowpaths is required as part of the ECCS TS.

For the MSLB event, the sequence of events takes the plant to cold shutdown conditions and; therefore, boration of the RCS is necessary. However, the boration flowpath in this case is required as part of the ECCS function.

The ECCS function of the RWST is explicitly modeled in the DCPP IPE; this function is being retained in the DCPP ECCS TS. The boration function of the RWST and boric acid storage system is not explicitly modeled in the DCPP PRA; however, the boration function in response to ATWS events is considered. The ATWS contribution to core damage is small, less than 1E-6. Thus, it can be concluded that this TS does not satisfy criterion 4.

(4) CONCLUSION

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.3.3.2 MOVABLE INCORE DETECTORS

Applicable Modes: When the Movable Incore Detection System is used for:
a. Recalibration of the Excore Neutron Flux Detection System, or
b. Monitoring the Quadrant Power Tilt Ratio, or
c. Measurement of $F^N_\Delta H$, $F_Q(Z)$ and F_{xy}.

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

This TS requires the movable incore detectors to be operable, within defined conditions, whenever the system is used for recalibration of excore detectors, monitoring the quadrant power tilt ratio, or measurement of F_Q and F^N -Delta H. If the system is not operable, the required action is not to use the system for these purposes. The requirements for maintaining F_Q and F^N -Delta H within limits are addressed in the TS for power distribution limits. Furthermore, the measurements are used in a confirmatory manner and do not provide direct input to reactor protection system or engineered safety features actuation system functions.

Ref. 1 states that the operability of the movable incore detectors ensures the accurate measurement of spatial neutron flux distribution of the core.

Ref. 3 notes that the movable incore detector system is not installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the RCPB. Also, the system is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Further, the movable incore detector system is not an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The movable incore detector TS is not applicable to installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the RCPB. The movable incore detector TS is associated indirectly with monitoring an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. However, this initial condition is only required to be monitored periodically by incore detectors.

The movable incore detector TS does not apply to an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

From Ref. 3, the movable incore detectors have not been shown to be a significant risk contributor to public health and safety by either operational experience or PSA. The detectors are used only for

periodic surveillance of the core power distribution and for calibration of the excore detectors and do not initiate any automatic protection action. The detectors are not modeled in the DCPP IPE.

Based on the above, the TS does not satisfy criteria 1, 2, 3 or 4.

(4) CONCLUSION

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.3.3.4 METEOROLOGICAL INSTRUMENTATION

Applicable Modes: At all times

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The meteorological instrumentation ensures that data is available to estimate potential radiological doses to the public from accidental or routine releases of radioactive materials to the atmosphere. The

instrumentation is used to assess the need for recommending protective measures following an accident. The meteorological instrumentation is not used to mitigate a DBA or transient.

Ref. 3 evaluated this instrumentation and concluded that it is not installed instrumentation that is used to detect degradation of the RCPB. Neither is it assumed to function in the safety analysis and is not an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The meteorological instrumentation TS is not applicable to installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the RCPB. Therefore, this TS does not satisfy criterion 1.

The meteorological instrumentation TS is also not associated with a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, this TS does not satisfy criterion 2.

The meteorological instrumentation TS does not apply to an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, this TS does not satisfy criterion 3.

The meteorological instrumentation is not modeled in the DCPP PRA. However, there is no indication that this function would be identified as risk significant if it was modeled in PRA models. Therefore, this TS does not satisfy criterion 4.

(4) **CONCLUSION**

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.3.3.10 EXPLOSIVE GAS MONITORING INSTRUMENTATION

Applicable Modes: During Gaseous Radwaste System operation

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident (DBA) or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The explosive gas monitoring instrumentation provides the capability to detect the concentration of oxygen and hydrogen in the waste gas

holdup system and provide an alarm if the concentrations exceed prescribed limits. According to LCO 3.3.3.10, this TS assures the operability of the instrumentation required for TS 3.11.2.5, "Explosive Gas Mixture of the Gaseous Effluents." According to the Bases of TS 3.3.3.10 and 3.11.2.5, the purpose of the limits on explosive gas concentrations and the monitoring instrumentation is to prevent an explosion in the waste gas holdup system. An explosion could result in a release of radioactive materials contained in the gaseous waste holdup system. Although release of the contents of a waste gas decay tank is an analyzed DBA, the analysis assumes that the tank fails and the contents are released without any mitigating circumstances. Therefore, the explosive gas limits are not an initial condition of a DBA.

The explosive gas monitoring instrumentation is not applicable to installed instrumentation used to detect and indicate in the control room a significant abnormal degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The explosive gas monitoring instrumentation is not applicable to a process variable, design feature, or operating restriction that is an initial condition of any DBA or transient analysis since the tank failure is assumed as the initiating event for the release. Thus, this TS does not satisfy criterion 2.

The explosive gas monitoring instrumentation is not assumed to function in the safety analysis. It is not a part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Thus, this TS does not satisfy criterion 3.

From Ref. 3, the explosive gas monitoring instrumentation has not been shown to be a significant risk contributor to public health and safety by either operational experience or PSA. The function of this instrumentation is to preclude inadvertent radioactivity releases from the waste gas holdup system due to a tank failure from a waste gas explosion. Severe accidents dominate public risk, not inadvertent releases. This system is not modeled in the DCPP IPE. Thus, this instrumentation does not satisfy criterion 4.

(4) CONCLUSION

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

(The TS will be relocated but a program statement will be added to new TS 6.8.4.j.)

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.9.3 DECAY TIME

Applicable Modes: During movement of irradiated fuel in the reactor vessel

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

This specification places a time limit on reactor subcriticality prior to the movement of irradiated fuel assemblies in the reactor vessel. This ensures that sufficient time has elapsed for the radioactive decay of short-lived fission products. The decay of short-lived fission products is assumed in the fuel handling accident.

Decay time is not installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the reactor coolant pressure boundary. Decay time does not satisfy criterion 1.

Decay time is an operating restriction that is an initial condition of a DBA that assumes the failure of the integrity of a fission product barrier. However, it was agreed upon in Industry/NRC meetings during the development of NUREG-1431 that this LCO may be relocated. This LCO is not contained in Ref. 2. However, the requirement for a minimum decay time of 100 hours prior to fuel handling is contained in the Bases of NUREG-1431, Rev. 1 (B 3.9.7). DCPP will be consistent with the decay time limit in the Bases of NUREG-1431, Rev. 1 upon implementation of the new standard TS. Based on NRC determination in Ref. 2, the screening criterion application question 2 may be answered with a "no".

Decay time is not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either the failure of or presents a challenge to the integrity of a fission product barrier. Decay time does not satisfy criterion 3.

Decay time is not modeled in the DCPP IPE. However, there is no indication that this function would be identified as risk significant if it was modeled in PRA models. Therefore, this TS does not satisfy criterion 4.

(4) CONCLUSION

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.9.5 COMMUNICATIONS

Applicable Modes: During Core Alterations

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

This specification requires communication between the control room and the refueling bridge to ensure that any abnormal change in the facility status or core reactivity observed on the control room

instrumentation can be communicated to the refueling bridge personnel during core alterations.

The TS requirements for communications are not applicable to installed instrumentation used to detect a significant abnormal degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The communications TS is not associated with a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Thus, this requirement does not meet criterion 2.

The TS for refueling communications does not apply to an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, the requirements do not satisfy criterion 3.

Communications during core alterations is not modeled in the DCPP IPE. However, there is no indication that this function would be identified as risk significant if it was modeled in PRA models. Therefore, this TS does not satisfy criterion 4.

(4) **CONCLUSION**

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.9.6 MANIPULATOR CRANE

Applicable Modes: During movement of control rods or fuel assemblies within the reactor vessel

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

This TS ensures that the lifting device on the manipulator crane has adequate capacity to lift the weight of a fuel assembly and a rod control cluster assembly, and that an automatic load limiting device is available

to prevent damage to the core internals or reactor vessel. This TS also ensures that the auxiliary hoist on the manipulator crane has adequate capacity for movement of control rods and fuel assemblies.

The TS requirements for the manipulator crane are not applicable to installed instrumentation used to detect a significant abnormal degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The manipulator crane TS is not associated with a process variable, design feature, or operating restriction that is monitored and controlled and is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Thus, this requirement does not meet criterion 2.

The TS for the manipulator crane does not apply to an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, this TS does not satisfy criterion 3.

The requirements of this technical specification are not a significant risk contributor to public health and safety by either operational experience or PSA. The manipulator crane is used to transport fuel assemblies during refueling operations. The DCPP IPE models the plant during power operations, and therefore does not include the manipulator crane in any risk quantifications. However, if the manipulator crane were included in the model, its significance would be negligible. Therefore, these requirements do not satisfy criterion 4.

(4) CONCLUSION

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.9.7 CRANE TRAVEL - FUEL HANDLING BUILDING

Applicable Modes: With fuel assemblies in the spent fuel pool

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

This specification ensures that loads in excess of one fuel assembly containing a control rod, plus the weight of the fuel handling tool, will not be moved over other fuel assemblies stored in the spent fuel

storage racks. Therefore, in the event of a drop of this load, the activity released is limited to that contained in one fuel assembly. This also prevents any possible distortion of fuel assemblies in the storage racks from achieving a critical configuration. This specification applies to prevention of a heavy load drop accident and assures that the damage caused by the load is limited to the equivalent of one spent fuel assembly. This assumption is consistent with the activity release assumed in the DBA safety analyses for a fuel handling accident.

The TS requirements for crane travel are not applicable to installed instrumentation used to detect a significant abnormal degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The fuel handling building crane travel TS is associated with an operating restriction for a heavy load drop event. This specification is not applicable to a process variable, design feature, or operating restriction that is monitored and controlled during power operation and is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Thus, this requirement does not meet criterion 2. This conclusion is consistent with the corresponding evaluation in Ref. 4.

The TS for crane travel does not apply to an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, these requirements do not satisfy criterion 3.

From Ref. 3, the fuel handling building crane has not been shown to be a significant risk contributor to public health and safety by either operational experience or PSA. Ref. 3 reviewed several environmental reports related to these cranes, and found their risk significance to be minimal. The spent fuel storage facility crane is not modeled in the DCPP IPE. Therefore, these requirements do not satisfy criterion 4.

(4) CONCLUSION

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.9.10.2 WATER LEVEL - REACTOR VESSEL (CONTROL RODS)

Applicable Modes: During movement of control rods within the reactor pressure vessel while in Mode 6

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

This specification places a lower limit on the amount of water above the top of the fuel assemblies in the reactor vessel during movement of

control rods. The Bases state that this ensures the water removes 99 percent of the assumed 10 percent iodine gap activity released from the rupture of an irradiated fuel assembly in the event of a fuel handling accident (FHA) during core alterations. However, the movement of control rods is not associated with the initial conditions of an FHA, and the Bases do not address any concerns regarding inadvertent criticality which could lead to a breach of the fuel rod cladding. Inadvertent criticality during Mode 6 is prevented by maintaining proper boron concentration in the coolant in accordance with LCO 3.9.1.

The TS requirements for water level - reactor vessel are not applicable to installed instrumentation used to detect a significant abnormal degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The water level - reactor vessel (control rods) TS are not associated with a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Thus, this requirement meets criterion 2.

The TS for water level - reactor vessel do not apply to an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, these requirements do not satisfy criterion 3.

The reactor water level during movement of control rods while in Mode 6 is not modeled in the DCPP IPE. However, there is no indication that this function would be identified as risk significant if it was modeled in PRA models. Therefore, this TS does not satisfy criterion 4.

(4) CONCLUSION

_ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.9.13 SPENT FUEL SHIPPING CASK MOVEMENT

Applicable Modes: During all cask handling operations

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The restriction on spent fuel shipping cask movement ensures that no fuel assemblies will be ruptured in the event of a spent fuel shipping

cask accident. The dose consequences of this accident are within the dose guideline values of 10 CFR Part 100.

Spent fuel cask handling and the spent fuel cask drop accident are addressed in FSAR Section 9.1.2.3.1 as revised by a PG&E approved 10 CFR 50.59 evaluation. Cask handling is addressed in general terms for a typical fuel cask shown in FSAR Figure 9.1-4, which is used as the basis for discussion of cask handling and the spent fuel pool cask drop accident in the FSAR. Prior to cask movement in the fuel handling building, a detailed evaluation and analysis using specific cask parameters will be performed in accordance with 10 CFR 50.59, and cask handling procedures will be revised or developed, as necessary, to reflect the results of the evaluations.

This specification does not contain requirements for installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the reactor coolant pressure boundary. This specification does not satisfy criterion 1.

This specification does not contain requirements on a process variable, design feature, or operating restriction that is monitored or controlled during power operation and is an initial condition of DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. This specification does not satisfy criterion 2.

This specification does not contain requirements for a SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. This specification does not satisfy criterion 3.

Spent fuel shipping cask movement is not modeled in the DCPP IPE. However, there is no indication that this function would be identified as risk significant if it was modeled in PRA models. Therefore, this TS does not satisfy criterion 4.

(4) **CONCLUSION**

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.10.1 SPECIAL TEST EXCEPTION - SHUTDOWN MARGIN

Applicable Modes: Mode 2

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

Ref. 4 states: "Special Test Exceptions 3.10.1 through 3.10.4 may be included with corresponding LCOs which are remaining in TS. Special

Test Exception 3.10.5 [which is DCPP TS 3.10.4] may be relocated outside of TS along with LCO 3.1.3.3."

LCO 3.10.1 is only applicable in Mode 2. The shutdown margin requirements for Modes 1 and 2 are retained in other reactivity control system TS; therefore, LCO 3.10.1 may be deleted. This conclusion is consistent with Ref. 4. However, DCPP has chosen to relocate TS 3.10.1 to the DCPP Equipment Control Guidelines and will address the entire reactivity control system TS during the conversion phase of the new standard technical specification program.

Shutdown margin during physics tests is not modeled in the DCPP PRA. However, there is no indication that this function would be identified as risk significant if it was modeled in PRA models. Therefore, this TS does not satisfy criterion 4.

(4) **CONCLUSION**

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.10.4 SPECIAL TEST EXCEPTION - POSITION INDICATION SYSTEM - SHUTDOWN

Applicable Modes: Modes 3, 4, and 5 during performance of rod drop time measurements and during surveillance of digital rod position indicators for Operability

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

Ref. 4 states that Special Test Exceptions 3.10.1 through 3.10.4 may be included with corresponding LCOs which are remaining in TS. Furthermore, Ref. 4 states that Special Test Exception 3.10.5 (DCPP TS 3.10.4) may be relocated outside of TS along with LCO 3.1.3.3.

In accordance with LAR 95-07, Attachment D, "Screening Form for TS 3.1.3.3," may be relocated from the TS. Therefore, TS 3.10.4 may be relocated.

(4) CONCLUSION

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.11.1.4 LIQUID HOLDUP TANKS

Applicable Modes: At all times

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES" then the TS shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The liquid holdup tank specifications impose limits on the quantity of radioactive material contained in specific outdoor tanks that may contain radwaste. Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of

an uncontrolled release of the tanks' contents, the resulting concentration would be less than the limits of 10 CFR 20, Appendix B. Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area. The tanks addressed by this specification include all those outdoor radwaste tanks that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the liquid radwaste treatment system.

The TS requirements for liquid holdup are not applicable to installed instrumentation used to detect a significant abnormal degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The liquid holdup TS are not associated with a process variable, design feature, or operating restriction that is monitored or controlled during power operation and is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Thus, this TS does not satisfy criterion 2.

The TS for liquid holdup do not apply to an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, this TS does not satisfy criterion 3.

From Ref. 3, the liquid holdup tanks, which hold radwaste, have not been shown to be a significant risk contributor to public health and safety by either operational experience or PSA. Risk of radioactivity release is dominated by severe accidents, not releases of radionuclides generated from normal operations. The liquid holdup tanks are not modeled in the DCPP IPE. Therefore, this TS do not satisfy criterion 4.

(4) CONCLUSION

___ This Technical Specification is retained.

_X_ The Technical Specification may be relocated to a licensee controlled document.

(The TS may be relocated but a program statement will be added to new TS 6.8.4.j.).

TECHNICAL SPECIFICATION SCREENING FORM

(1) **TECHNICAL SPECIFICATION** 3.11.2.5 EXPLOSIVE GAS MIXTURE

Applicable Modes: At all times

(2) **EVALUATION OF POLICY STATEMENT CRITERIA**

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment (PSA) has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the TS shall be included in the new TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) **DISCUSSION**

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the waste gas holdup system is maintained below the flammability limits of hydrogen and oxygen. Maintaining these limits provides assurance that the releases

of radioactive materials will be controlled in conformance with the requirements of GDC 60 of Appendix A to 10 CFR 50. The safety analysis concerning the gaseous radwaste system assumes that a storage tank ruptures, from unspecified causes, and releases its contents without mitigation.

The TS requirements for explosive gas mixtures are not applicable to installed instrumentation used to detect a significant abnormal degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The explosive gas mixture TS are not associated with a process variable, design feature, or operating restriction that is monitored or controlled during power operation and is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Thus, this TS does not meet criterion 2. This conclusion is consistent with the corresponding evaluation in Ref. 4.

The TS for explosive gas mixture does not apply to an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, this TS does not satisfy criterion 3.

The explosive gas mixture of the waste gas holdup tanks has not been shown to be a significant risk contributor to public health and safety by either operational experience or PSA. Risk of radioactivity release is dominated by severe accidents, not releases of radionuclides generated from normal operations. In addition, from Ref. 3 the quantity of radioactivity contained in each pressurized gas storage tank in the waste gas holdup system is limited to assure a release would be substantially below the dose guideline values of 10 CFR 100. The waste gas holdup tanks are not modeled in the DCPP IPE. Therefore, this TS does not satisfy criterion 4.

(4) CONCLUSION

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

(The TS may be relocated but a program statement will be added to new TS 6.8.4.j.).

TECHNICAL SPECIFICATION SCREENING FORM

(1) TECHNICAL SPECIFICATION 3.11.2.6 GAS STORAGE TANKS

Applicable Modes: At all times

(2) EVALUATION OF POLICY STATEMENT CRITERIA

Is the Technical Specification applicable to:

YES	NO		
__	X	(1)	Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
__	X	(2)	A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(3)	A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
__	X	(4)	An SSC which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

If the answer to any one of the above questions is "YES", then the (TS) shall be retained in the TS.

If the answer to all four of the above questions is "NO", the TS may be relocated to a controlled document.

(3) DISCUSSION

The gas storage tank specifications impose limits on the quantity of radioactive material contained in those tanks for which the quantity of radioactivity contained is not limited directly or indirectly by another TS. Restricting the quantity of radioactivity contained in each gas storage tank provides assurance

that in the event of an uncontrolled release of the tank's contents, the resulting whole body exposure to a member of the public at the nearest site boundary will not exceed 0.5 rem. This is consistent with Standard Review Plan 11.3 and Branch Technical Position ETSB 11-5, "Postulated Radioactive Releases Due to a Waste Gas System Leak or Failure." The safety analysis concerning the gaseous radwaste system assumes a rupture of a storage tank without mitigation.

The TS requirements for gas storage tanks are not applicable to installed instrumentation used to detect a significant abnormal degradation of the RCPB; therefore, this TS does not satisfy criterion 1.

The gas storage tank TS are associated with a process variable, design feature, or operating restriction that is monitored or controlled during power operation and is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. However, the barrier in this case is the tank itself which is not a barrier that is monitored and controlled during power operation of the plant. Therefore, this TS does not satisfy criterion 2. This conclusion is consistent with the corresponding evaluation in Ref. 4.

The TS for gas storage tanks does not apply to an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, this TS does not satisfy criterion 3.

From Ref. 3, the waste gas holdup tanks, which hold radwaste, have not been shown to be a significant risk contributor to public health and safety by either operational experience or PSA. In addition, from Ref. 3 the quantity of radioactivity contained in each pressurized gas storage tank in the waste gas holdup system is limited to assure a release would be substantially below the dose guideline values of 10 CFR 100. The waste gas holdup tanks are not modeled in the DCPP IPE. Therefore, this TS does not satisfy criterion 4.

(4) **CONCLUSION**

__ This Technical Specification is retained.

X The Technical Specification may be relocated to a licensee controlled document.

(The TS may be relocated but a program statement will be added to new TS 6.8.4.j.).

REFERENCES:

1. DCPP Units 1 and 2 Technical Specifications and Bases (NUREG-1151) as amended.

2. Standard Technical Specifications, Westinghouse Plants, NUREG-1431, Rev. 1 dated April 1995

3. J. D. Andrachek, et. al., Methodically Engineered, Restructured, and Improved Technical Specifications, MERITS Program - Phase II Task 5, Criteria Application, WCAP-11618, November 1987.

4. NRC letter to Westinghouse Owners Group (T. Murley to R. Newton), "NRC Staff Review of Nuclear Steam Supply System Vendor Owners Groups' Application of the Commission's Interim Policy Statement Criteria to Standard Technical Specifications," May 9, 1988.

5. 10CFR50.36, "Technical Specifications," dated July 19, 1995 (Federal Register Vol. 60, No. 138, Page 36959).

6. Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors, NRC, Federal Register, Page 39132, Vol. 58, No. 138.

7. PG&E letter, DCL-92-087, "Response to Generic Letter 88-20, Individual Plant Examination," dated April 14, 1992.