NPF-10/15-260

ATTACHMENT B

(Proposed Specification)

### AUXILIARY FEEDWATER SYSTEM

### LIMITING CONDITION FOR OPERATION

- 3.7.1.2 At least three independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:
  - a. Two motor-driven auxiliary feedwater pumps, each capable of being powered from separate emergency busses, and
  - b. One steam turbine-driven auxiliary feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2 and 3.

#### ACTION:

- a. With one auxiliary feedwater pump inoperable, restore the required auxiliary feedwater pumps to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With two auxiliary pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours:
- c. With three auxiliary feedwater pumps inoperable, immediately initiate corrective action to restore at least one auxiliary feedwater pump to OPERABLE status as soon as possible.

- 4.7.1.2.1 Each auxiliary feedwater pump shall be demonstrated OPERABLE:
  - a. At least once per 31 days by:
    - 1. Testing the turbine driven pump and both motor driven pumps pursuant to Specification 4.0.5. The provisions of Specification 4.0.4 are not applicable for the turbine driven pump for entry into MODE 3.
    - 2. 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.
    - 3. Verifying that both manual valves in the suction lines from the primary AFW supply tank (condensate storage tank T-121) to each AFW pump, and the manual discharge line valve of each AFW pump are locked in the open position.

## SURVEILLANCE REQUIREMENTS (Continued)

- 4. Verifying that the AFW piping is full of water by venting the accessible discharge piping high points.
- b. At least once per refueling interval during shutdown by:
  - 1. Verifying that each automatic valve in the flow path actuates to its correct position upon receipt of an EFAS test signal.
  - Verifying that each pump starts automatically upon receipt of an EFAS test signal.
- 4.7.1.2.2 The auxiliary feedwater system shall be demonstrated OPERABLE prior to entering MODE 2 following each COLD SHUTDOWN by performing a flow test to verify the normal flow path from the primary AFW supply tank (condensate storage tank T-121) through each auxiliary feedwater pump to its associated steam

## 3/4.7.3 COMPONENT COOLING WATER SYSTEM

## LIMITING CONDITION FOR OPERATION

3.7.3 At least two independent component cooling water loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

With only one component cooling water loop OPERABLE, restore at least two loops to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

## SURVEILLANCE REQUIREMENTS

# 4.7.3 At least two component cooling water loops shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. At least once per refueling interval during shutdown, by verifying that each automatic valve servicing safety-related equipment actuates to its correct position and each component cooling water pump starts automatically on an SIAS test signal.

## 3/4.7.4 SALT WATER COOLING SYSTEM

## LIMITING CONDITION FOR OPERATION

3.7.4 At least two independent salt water cooling loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

With only one salt water cooling loop OPERABLE, restore at least two loops to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- 4.7.4 At least two sait water cooling loops shall be demonstrated OPERABLE:
  - a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed or otherwise secured in position, is in its correct position.
  - b. At least once per refueling interval during shutdown, by verifying that each automatic valve servicing safety related equipment actuates to its correct position and each salt water cooling pump starts automatically on an SIAS test signal.

## 3/4.7.10 EMERGENCY CHILLED WATER SYSTEM

## LIMITING CONDITION FOR OPERATION

3.7.10 Two independent emergency chilled water systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

- a. With only one emergency chilled water system OPERABLE, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With only one emergency chilled water system OPERABLE:
  - 1. Within 1 hour verify that the normal HVAC system is providing space cooling to the vital power distribution rooms containing emergency battery chargers and inverters that depend on the inoperable emergency chilled water system for space cooling, and
  - 2. Within 8 hours establish OPERABILITY of the safe shutdown systems which do not depend on the inoperable emergency chilled water system (one train each of boration and auxiliary feedwater per Sections 3/4.1.2.2 and 3/4.7.1.2, respectively, and one bank of pressurizer heaters per Section 3/4.4.3) and
  - 3. Within 24 hours establish OPERABILITY of all required systems, subsystems, trains, components and devices that depend on the remaining OPERABLE emergency chilled water system for space cooling.

If these conditions are not satisfied within the specified time, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- 4.7.10 Each of the above required emergency chilled water systems shall be demonstrated OPERABLE:
  - a. At least once per 31 days by verifying that each manual valve servicing safety-related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position and,

## EMERGENCY CHILLED WATER SYSTEM

## SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per refueling interval by verifying that: each poweroperated or automatic valve servicing safety-related equipment actuates to its correct position and each chilled water pump starts automatically on a TGIS, CRIS, SIAS and, with irradiated fuel in the storage pool, FHIS. ATTACHMENT C

(Existing Specifications)

### AUXILIARY FEEDWATER SYSTEM

### LIMITING CONDITION FOR OPERATION

- 3.7.1.2 At least three independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:
  - a. Two motor-driven auxiliary feedwater pumps, each capable of being powered from separate emergency busses, and
  - One steam turbine-driven auxiliary feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2 and 3.

#### ACTION:

- a. With one auxiliary feedwater pump inoperable, restore the required auxiliary feedwater pumps to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With two auxiliary pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.
- c. With three auxiliary feedwater pumps inoperable, immediately initiate corrective action to restore at least one auxiliary feedwater pump to OPERABLE status as soon as possible.

- 4.7.1.2.1 Each auxiliary feedwater pump shall be demonstrated OPERABLE:
  - a. At least once per 31 days by:
    - Testing the turbine driven pump and both motor driven pumps pursuant to Specification 4.0.5. The provisions of Specification 4.0.4 are not applicable for the turbine-driven pump for entry into MODE 3.
    - 2. 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.
    - 3. Verifying that both manual valves in the suction lines from the primary AFW supply tank (condensate storage tank T-121) to each AFW pump, and the manual discharge line valve of each AFW pump are locked in the open position.

## SURVEILLANCE REQUIREMENTS (Continued)

- Verifying that the AFW piping is full of water by venting the accessible discharge piping high points.
- b. At least once per 18 months during shutdown by:
  - 1. Verifying that each automatic valve in the flow path actuates to its correct position upon receipt of an EFAS test signal.
  - Verifying that each pump starts automatically upon receipt of an EFAS test signal.
- 4.7.1.2.2 The auxiliary feedwater system shall be demonstrated OPERABLE prior to entering MODE 2 following each COLD SHUTDOWN by performing a flow test to verify the normal flow path from the primary AFW supply tank (condensate storage tank T-121) through each auxiliary feedwater pump to its associated steam generator.

## 3/4.7.3 COMPONENT COOLING WATER SYSTEM

## LIMITING CONDITION FOR OPERATION

3.7.3 At least two independent component cooling water loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

With only one component cooling water loop OPERABLE, restore at least two loops to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- 4.7.3 At least two component cooling water loops shall be demonstrated OPERABLE:
  - a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position.
  - b. At least once per 18 months during shutdown, by verifying that each automatic valve servicing safety related equipment actuates to its correct position and each component cooling water pump starts automatically on an SIAS test signal.

## 3/4.7.4 SALT WATER COOLING SYSTEM

## LIMITING CONDITION FOR OPERATION

3.7.4 At least two independent salt water cooling loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

With only one salt water cooling loop OPERABLE, restore at least two loops to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- 4.7.4 At least two salt water cooling loops shall be demonstrated OPERABLE:
  - a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed or otherwise secured in position, is in its correct position.
  - b. At least once per 18 months during shutdown, by verifying that each automatic valve servicing safety related equipment actuates to its correct position and each salt water cooling pump starts automatically on an SIAS test signal.

## 3/4.7.10 EMERGENCY CHILLED WATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.7.10 Two independent emergency chilled water systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

- a. With only one emergency chilled water system OPERABLE, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With only one emergency chilled water system OPERABLE:
  - 1. Within 1 hour verify that the normal HVAC system is providing space cooling to the vital power distribution rooms containing emergency battery chargers and inverters that depend on the inoperable emergency chilled water system for space cooling, and
  - 2. Within 8 hours establish OPERABILITY of the safe shutdown systems which do not depends on the inoperable emergency chilled water system (one train each of boration and auxiliary feedwater per Sections 3/4.1.2.2 and 3/4.7.1.2, respectively, and one bank of pressurizer heaters per Section 3/4.4.3) and
  - 3. Within 24 hours establish OPERABILITY of all required systems, subsystems, trains, components and devices that depend on the remaining OPERABLE emergency chilled water system for space cooling.

If these conditions are not satisfied within the specified time, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

- 4.7.10 Each of the above required emergency chilled water systems shall be demonstrated OPERABLE:
  - a. At least once per 31 days by verifying that each manual valve servicing safety-related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position and.

DEC 19 1984

## EMERGENCY CHILLED WATER SYSTEM

## SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per 18 months by verifying that: each power-operated or automatic valve servicing safety-related equipment actuates to its correct position and each chilled wter pump starts automatically on a TGIS, CRIS, SIAS and, with irradiated fuel in the storage pool, FHIS.

## ATTACHMENT D

(Proposed Specifications)

### AUXILIARY FEEDWATER SYSTEM

## LIMITING CONDITION FOR OPERATION

- 3.7.1.2 At least three independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:
  - a. Two motor-driven auxiliary feedwater pumps, each capable of being powered from separate emergency busses, and
  - b. One steam turbine-driven auxiliary feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2 and 3.

#### ACTION:

- a. With one auxiliary feedwater pump inoperable, restore the required auxiliary feedwater pumps to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With two auxiliary pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.
- c. With three auxiliary feedwater pumps inoperable, immediately initiate corrective action to restore at least one auxiliary feedwater pump to OPERABLE status as soon as possible.

- 4.7.1.2.1 Each auxiliary feedwater pump shall be demonstrated OPERABLE:
  - a. At least once per 31 days by:
    - 1. Testing the turbine driven pump and both motor driven pumps pursuant to Specification 4.0.5. The provisions of Specification 4.0.4 are not applicable for the turbine-driven pump for entry into MODE 3.
    - 2. 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.
    - 3. Verifying that both manual valves in the suction lines from the primary AFW supply tank (condensate storage tank T-121) to each AFW pump, and the manual discharge line valve of each AFW pump are locked in the open position.

## SURVEILLANCE REQUIREMENTS (Continued)

- 4. Verifying that the AFW piping is full of water by venting the accessible discharge piping high points.
- b. At least once per refueling interval during shutdown by:
  - 1. Verifying that each automatic valve in the flow path actuates to its correct position upon receipt of an EFAS test signal.
  - Verifying that each pump starts automatically upon receipt of an EFAS test signal.
- 4.7.1.2.2 The auxiliary feedwater system shall be demonstrated OPERABLE prior to entering MODE 2 following each COLD SHUTDOWN by performing a flow test to verify the normal flow path from the primary AFW supply tank (condensate storage tank T-121) through each auxiliary feedwater pump to its associated steam generator.

## 3/4.7.3 COMPONENT COOLING WATER SYSTEM

## LIMITING CONDITION FOR OPERATION

3.7.3 At least two independent component cooling water loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

With only one component cooling water loop OPERABLE, restore at least two loops to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- 4.7.3 At least two component cooling water loops shall be demonstrated OPERABLE:
  - a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position.
  - b. At least once per refueling interval during shutdown, by verifying that each automatic valve servicing safety-related equipment actuates to its correct position and each component cooling water pump starts automatically on an SIAS test signal.

## 3/4.7.4 SALT WATER COOLING SYSTEM

## LIMITING CONDITION FOR OPERATION

3.7.4 At least two independent salt water cooling loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

With only one salt water cooling loop OPERABLE, restore at least two loops to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- 4.7.4 At least two salt water cooling loops shall be demonstrated OPERABLE:
  - a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed or otherwise secured in position, is in its correct position.
  - that each automatic valve servicing safety-related equipment actuates to its correct position and each salt water cooling pump starts automatically on an SIAS test signal.

### 3/4.7.10 EMERGENCY CHILLED WATER SYSTEM

## LIMITING CONDITION FOR OPERATION

3.7.10 Two independent emergency chilled water systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

- a. With only one emergency chilled water system OPERABLE, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With only one emergency chilled water system OPERABLE:
  - 1. Within 1 hour verify that the normal HVAC system is providing space cooling to the vital power distribution rooms containing emergency battery chargers and inverters that depend on the inoperable emergency chilled water system for space cooling, and
  - 2. Within 8 hours establish OPERABILITY of the safe shutdown systems which do not depends on the inoperable emergency chilled water system (one train each of boration and auxiliary feedwater per Sections 3/4.1.2.2 and 3/4.7.1.2, respectively, and one bank of pressurizer heaters per Section 3/4.4.3) and
  - Within 24 hours establish OPERABILITY of all required systems, subsystems, trains, components and devices that depend on the remaining OPERABLE emergency chilled water system for space cooling.

If these conditions are not satisfied within the specified time, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- 4.7.10 Each of the above required emergency chilled water systems shall be demonstrated OPERABLE:
  - a. At least once per 31 days by verifying that each manual valve servicing safety-related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position and,

## EMERGENCY CHILLED WATER SYSTEM

## SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per refueling interval by verifying that: each poweroperated or automatic valve servicing safety-related equipment actuates
to its correct position and each chilled water pump starts automatically
on a TGIS, CRIS, SIAS and, with irradiated fuel in the storage pool, FHIS.