

ATTACHMENT 2  
LICENSE AMENDMENT APPLICATION, LCR 93-05, NLR-N93039  
ULTIMATE HEAT SINK TEMPERATURE CHANGES  
FACILITY OPERATING LICENSE NPF-57  
HOPE CREEK GENERATING STATION  
DOCKET NO. 50-354

TECHNICAL SPECIFICATION PAGES WITH PEN AND INK CHANGES

The following Technical Specifications for  
Facility Operating License No. NPF-57 are affected  
by this license amendment request:

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PLANT SYSTEMS

ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

3.7.1.3 The ultimate heat sink (Delaware River) shall be OPERABLE with:

- a. A minimum river water level at or above elevation -13'0 Mean Sea Level, USGS datum (76'0 PSE&G datum), and
- b. An average river water temperature of less than or equal to ~~90.5°F~~ <sup>88.6°F</sup>

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, 4, 5 and \*.

ACTION:

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With the requirements of the above specification not satisfied:

- a. In OPERATIONAL CONDITIONS 1, 2 or 3, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- b. In OPERATIONAL CONDITIONS 4 or 5, declare the SACS system and the station service water system inoperable and take the ACTION required by Specification 3.7.1.1 and 3.7.1.2.
- c. In Operational Condition \*, declare the plant service water system inoperable and take the ACTION required by Specification 3.7.1.2. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.1.3 The ultimate heat sink shall be determined OPERABLE:

- a. By verifying the river water level to be greater than or equal to the minimum limit at least once per 24 hours.
- b. By verifying river water temperature to be within its limit:
  - 1) at least once per 24 hours when the river water temperature is less than or equal to 85°F.
  - 2) at least once per ~~24~~ <sup>2</sup> hours when the river water temperature is greater than 85°F.

\*When handling irradiated fuel in the secondary containment.

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With the river water temperature in excess of 88.6°F, the plant may continue normal operation provided that the period of elevated river water temperature is less than or equal to 6 hours; otherwise, with the requirements of the above specification not satisfied:

## 3/4.7 PLANT SYSTEMS

### BASES

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#### 3/4.7.1 SERVICE WATER SYSTEMS

The OPERABILITY of the station service water and the safety auxiliaries cooling systems ensures that sufficient cooling capacity is available for continued operation of the SACS and its associated safety-related equipment during normal and accident conditions. The redundant cooling capacity of these systems, assuming a single failure, is consistent with the assumptions used in the accident conditions within acceptable limits.

#### 3/4.7.2 CONTROL ROOM EMERGENCY FILTRATION SYSTEM

The OPERABILITY of the control room emergency filtration system ensures that 1) the ambient air temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by this system and 2) the control room will remain habitable for operations personnel during and following all design basis accident conditions. Continuous operation of the system with the heaters and humidity control instruments OPERABLE for 10 hours during each 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criteria 19 of Appendix "A", 10 CFR Part 50.

#### 3/4.7.3 FLOOD PROTECTION

The requirement for flood protection ensures that facility flood protection features are in place in the event of flood conditions. The limit of elevation 10.5' Mean Sea Level is based on the elevation at which facility flood protection features provide protection to safety related equipment.

#### 3/4.7.4 REACTOR CORE ISOLATION COOLING SYSTEM

The reactor core isolation cooling (RCIC) system is provided to assure adequate core cooling in the event of reactor isolation from its primary heat sink and the loss of feedwater flow to the reactor vessel without requiring actuation of any of the Emergency Core Cooling System equipment. The RCIC system is conservatively required to be OPERABLE whenever reactor steam dome pressure exceeds 150 psig. This pressure is substantially below that for which the RCIC system can provide adequate core cooling for events requiring the RCIC system.

The RCIC system specifications are applicable during OPERATIONAL CONDITIONS 1, 2 and 3 when reactor vessel steam dome pressure exceeds 150 psig because RCIC is the primary non-ECCS source of emergency core cooling when the reactor is pressurized.

With the RCIC system inoperable, adequate core cooling is assured by the OPERABILITY of the HPCI system and justifies the specified 14 day out-of-service period.

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If average river water temperature is greater than 85°F and a Loss of Offsite Power (LOP) concurrent with a loss of a SSWS/SACS loop occurs, operator actions must be taken to increase the heat removal capabilities of the SACS heat exchangers and minimize the total heat duty. These actions and the conditions under which they must be taken are contained in approved station operating procedures.

Although the sustained six hour temperature requirement would permit the temperature to rise above the new UHS limit for short durations, this allowance is justified based on probabilistic risk assessment (PRA) results, transient nature of the UHS temperature excursions and the conservative nature of the temperature limit calculation.