LICENSE AMENDMENT REQUEST DATED August 15, 1996

Amendment of Containment Cooling Systems Technical Specifications to Conform to Their Supporting Analyses

EXHIBIT B

Appendix A, Technical Specification Pages
Marked Up Pages

TS.3.3-4
B.3.3-3
B.3.3-3 Overflow

3.3.B. Containment Cooling Systems

1. A reactor shall not be made or maintained critical nor shall reactor coolant system average temperature exceed 200°F unless the following conditions are satisfied (except as specified in 3.3.B.2 below):

   a. Two containment spray pumps are OPERABLE.

   b. Four containment fan cooler units are OPERABLE.

   c. The spray additive tank is OPERABLE with not less than 2590 gallons of solution with a sodium hydroxide concentration of 9% to 11% by weight inclusive.

   d. Manual valves in the above systems that could (if improperly positioned) reduce spray flow below that assumed for accident analysis, shall be blocked and tagged in the proper position. During POWER OPERATION, changes in valve position will be under direct administrative control.

   e. The containment spray system motor operated valves MV-32096 and MV-32097 (Unit 2 valves: MV-32108 and MV-32109) shall be closed and shall have the motor control center supply breakers in the off position.

2. During STARTUP OPERATION or POWER OPERATION, any one of the following conditions of inoperability may exist provided STARTUP OPERATION is discontinued until OPERABILITY is restored. If OPERABILITY is not restored within the time specified, be in at least HOT SHUTDOWN within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

   a. One containment fan cooler train~~unit~~ may be inoperable for 7 days~~, provided both containment spray pumps are OPERABLE~~.

   b. One containment spray train~~pump~~ may be inoperable for 72 hours~~, provided at least two containment fan cooler units are OPERABLE~~.

   c. ~~Two containment fan cooler units may be inoperable for 72 hours, provided at least one containment spray pump is OPERABLE.~~

   ~~d. Two containment spray pumps may be inoperable for 72 hours, provided four containment fan cooler units are OPERABLE.~~

   ~~e.~~ The spray additive tank may be inoperable for 24~~72~~ hours.

3.3 ENGINEERED SAFETY FEATURES

Bases continued

The containment cooling function is provided by two independent systems: containment fan cooler (CFC)~~units~~ and containment spray~~s~~. The CFC system consists of two separate trains with each train consisting of two fan coil units. The containment spray system consists of two independent trains, except that each train is supplied sodium hydroxide from a single, common spray additive tank. During normal operation, two~~four~~ CFC trains~~containment fan cooler units~~ are utilized to remove heat lost from equipment and piping within the containment. In the event of the Design Basis Accident, one containment fan cooler unit plus one containment spray pump ~~any one of the following combinations~~ will provide sufficient cooling to reduce containment pressure and maintain off-site and control room doses within regulatory limits~~: four containment fan cooler units, two containment spray pumps or two containment fan cooler units plus one containment spray pump~~ (Reference 4). One~~Two of the four~~ CFC~~containment fan cooler~~ train~~units~~ is~~are~~ permitted to be inoperable during POWER OPERATION. This is an abnormal operating situation, in that plant operating procedures require that inoperable CFC~~containment fan cooler~~ units be repaired as soon as practical. However, because of the difficulty of access to make repairs, it is important on occasion to be able to operate temporarily with only one~~two~~ CFC~~containment fan cooler~~ train~~units~~. One~~Two~~ CFC~~containment fan cooler~~ train~~units~~ can provide adequate cooling for normal operation when the CFC~~containment fan cooler~~ units are cooled by the chilled water system (Reference 3). Compensation for this mode of operation is provided by the high degree of redundancy of containment cooling systems during a Design Basis Accident.

One component cooling water pump together with one component cooling heat exchanger can accommodate the heat removal load on one unit, either following a loss-of-coolant accident or during normal plant shutdown. The four pumps of the two-unit facility can be cross connected as necessary to accommodate temporary outage of the pump. If, during the post-accident phase, the component cooling water supply were lost, core and containment cooling could be maintained until repairs were effected (Reference 5).

Cooling water can be supplied by either of the two horizontal motor-driven pumps, by a safeguards motor-driven pump or by either of two safeguards diesel-driven pumps. (Reference 6). Operation of a single cooling water pump provides sufficient cooling in one unit during the injection and recirculation phases of a postulated loss-of coolant accident plus sufficient cooling to maintain the second unit in a hot standby condition.

TS.3.3.D.1.a assures that an automatic Safety Injection signal to the cooling water header isolation valves will not align both OPERABLE safeguards pumps to the same safeguards train.

TS.3.3.D.1.a also assures that 121 cooling water pump is aligned to provide cooling water to the same train as the train from which it is being powered (e.g., if 121 cooling wager pump is aligned to Train B cooling water header, it needs to be powered from Bus 26 and, ultimately, Diesel Generator D6 in the event of a loss of offsite power). Otherwise, the single failure of a diesel generator could leave one train of engineered safety features without power and the other train without cooling water.

The minimum fuel supply of 19,000 gallons wil supply one diesel-driven cooling water pump for 14 days. Note that the 19,000 gallon requirement is included in the 70,000 gallon total diesel fuel oil requirement of Specification 3.7.A.5 for Unit 1.

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Amendment of Containment Cooling Systems Technical Specifications to Conform to Their Supporting Analyses

EXHIBIT C

Appendix A, Technical Specification Pages
Revised Pages

TS.3.3-4
B.3.3-3

3.3.B. Containment Cooling Systems

1. A reactor shall not be made or maintained critical nor shall reactor coolant system average temperature exceed 200°F unless the following conditions are satisfied (except as specified in 3.3.B.2 below):

   a. Two containment spray pumps are OPERABLE.

   b. Four containment fan cooler units are OPERABLE.

   c. The spray additive tank is OPERABLE with not less than 2590 gallons of solution with a sodium hydroxide concentration of 9% to 11% by weight inclusive.

   d. Manual valves in the above systems that could (if improperly positioned) reduce spray flow below that assumed for accident analysis, shall be blocked and tagged in the proper position. During POWER OPERATION, changes in valve position will be under direct administrative control.

   e. The containment spray system motor operated valves MV-32096 and MV-32097 (Unit 2 valves: MV-32108 and MV-32109) shall be closed and shall have the motor control center supply breakers in the off position.

2. During STARTUP OPERATION or POWER OPERATION, any one of the following conditions of inoperability may exist provided STARTUP OPERATION is discontinued until OPERABILITY is restored. If OPERABILITY is not restored within the time specified, be in at least HOT SHUTDOWN within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

   a. One containment fan cooler train may be inoperable for 7 days .

   b. One containment spray train may be inoperable for 72 hours.

   c. The spray additive tank may be inoperable for 24 hours.

3.3 ENGINEERED SAFETY FEATURES

Bases continued

The containment cooling function is provided by two independent systems: containment fan cooler (CFC) and containment spray. The CFC system consists of two separate trains with each train consisting of two fan coil units. The containment spray system consists of two independent trains, except that each train is supplied sodium hydroxide from a single, common spray additive tank. During normal operation, two CFC trains are utilized to remove heat lost from equipment and piping within the containment. In the event of the Design Basis Accident, one containment fan cooler unit plus one containment spray pump will provide sufficient cooling to reduce containment pressure and maintain off-site and control room doses within regulatory limits (Reference 4). One CFC train is permitted to be inoperable during POWER OPERATION. This is an abnormal operating situation, in that plant operating procedures require that inoperable CFC units be repaired as soon as practical. However, because of the difficulty of access to make repairs, it is important on occasion to be able to operate temporarily with only one CFC train. One CFC train can provide adequate cooling for normal operation when the CFC units are cooled by the chilled water system (Reference 3). Compensation for this mode of operation is provided by the high degree of redundancy of containment cooling systems during a Design Basis Accident.

One component cooling water pump together with one component cooling heat exchanger can accommodate the heat removal load on one unit, either following a loss-of-coolant accident or during normal plant shutdown. The four pumps of the two-unit facility can be cross connected as necessary to accommodate temporary outage of the pump. If, during the post-accident phase, the component cooling water supply were lost, core and containment cooling could be maintained until repairs were effected (Reference 5).

Cooling water can be supplied by either of the two horizontal motor-driven pumps, by a safeguards motor-driven pump or by either of two safeguards diesel-driven pumps. (Reference 6). Operation of a single cooling water pump provides sufficient cooling in one unit during the injection and recirculation phases of a postulated loss-of coolant accident plus sufficient cooling to maintain the second unit in a hot standby condition.

TS.3.3.D.1.a assures that an automatic Safety Injection signal to the cooling water header isolation valves will not align both OPERABLE safeguards pumps to the same safeguards train.

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The minimum fuel supply of 19,000 gallons wil supply one diesel-driven cooling water pump for 14 days. Note that the 19,000 gallon requirement is included in the 70,000 gallon total diesel fuel oil requirement of Specification 3.7.A.5 for Unit 1.