

Exelon Generation  
4300 Winfield Road  
Warrenville, IL 60555

www.exeloncorp.com

10 CFR 50.90

RS-01-152

August 2, 2001

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D C 20555

LaSalle County Station, Units 1 and 2  
Facility Operating License Nos. NPF-11 and NPF-18  
NRC Docket Nos. 50-373 and 50-374

Subject: Application for Amendment to Technical Specifications Surveillance Requirement  
for the Ultimate Heat Sink Temperature

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company (EGC), LLC, proposes a change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. NPF-11 and NPF-18. Specifically, the proposed change will temporarily modify TS Section 3.7.3, "Ultimate Heat Sink (UHS)," Surveillance Requirement (SR) 3.7.3.1. This SR verifies that the cooling water temperature supplied to the plant from the Core Standby Cooling System (CSCS) pond is  $\leq 100$  °F every 24 hours. With the cooling water temperature supplied to the plant from the CSCS pond greater than 100 °F, the UHS must be declared inoperable in accordance with TS 3.7.3. TS 3.7.3, Required Action B.1, requires that both units must be placed in Mode 3 within 12 hours and Required Action B.2 requires that both units must be placed in Mode 4 within 36 hours.

Prolonged hot weather in the area has resulted in sustained elevated cooling water temperature supplied to the plant from the CSCS pond. High temperatures and humidity during the daytime, in conjunction with very little cooling at night and very little precipitation, have resulted in elevated water temperatures in LaSalle County Station's UHS.

The UHS consists of an excavated CSCS pond integral with the cooling lake, and the piping and valves connecting the UHS to the Residual Heat Removal Service Water System and Diesel Generator Cooling Water System.

A-001

This amendment is being sought to temporarily increase the temperature limit of the cooling water supplied to the plant from the CSCS pond in SR 3.7.3.1 to  $\leq 103$  °F through September 30, 2001.

The information supporting the proposed TS change is subdivided as follows.

1. Attachment A gives a description and safety analysis for the proposed TS change.
2. Attachment B includes the marked-up and retyped TS page with the proposed change indicated.
3. Attachment C describes the evaluation performed in accordance with 10 CFR 50.92(c), which provides information supporting a finding of no significant hazards consideration.
4. Attachment D provides information supporting an Environmental Assessment.

The proposed TS change has been reviewed by the LaSalle County Station Plant Operations Review Committee (PORC) and approved by the Nuclear Safety Review Board (NSRB) in accordance with the Quality Assurance Program.

EGC is notifying the State of Illinois of this application for amendment by transmitting a copy of this letter and its attachments to the designated State Official.

We request approval of the proposed change as soon as possible to avoid a potential shutdown of LaSalle County Station, Units 1 and 2. The average temperature of the UHS reached 98 °F on July 21, 2001. Continued hot weather conditions through the summer may result in the temperature exceeding the TS limit of 100 °F. We request this change be made effective immediately upon issuance and we intend to implement this proposed temporary change upon issuance until its expiration on September 30, 2001. Should the need for this amendment become urgent, we will request that the NRC process this amendment request on an exigent basis. Should you have any questions concerning this submittal, please contact Mr. T. S. Simpkin at (630) 657-2821.

Respectfully,



K. A. Ainger  
Director- Licensing  
Mid-West Regional Operating Group

Attachments:

- |               |  |
|---------------|--|
| Attachment A. | Description and Safety Analysis for the Proposed TS Change               |
| Attachment B. | Marked-up and Retyped TS Page for the Proposed TS Change                 |
| Attachment C. | Information Supporting a Finding of No Significant Hazards Consideration |
| Attachment D. | Information Supporting an Environmental Assessment                       |

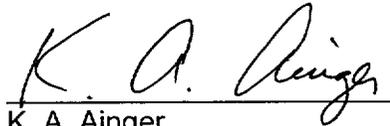
cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – LaSalle County Station  
Office of Nuclear Facility Safety – Illinois Department of Nuclear Safety

STATE OF ILLINOIS )  
IN THE MATTER OF: )  
EXELON GENERATION COMPANY (EGC), LLC ) Docket Numbers  
LASALLE COUNTY STATION - UNIT 1 and UNIT 2 ) 50-373 and 50-374

SUBJECT: Application for Amendment to Technical Specifications  
Surveillance Requirement for the Ultimate Heat Sink  
Temperature

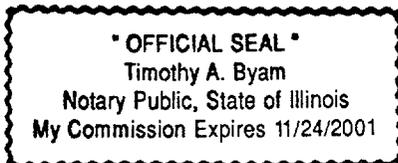
**AFFIDAVIT**

I affirm that the content of this transmittal is true and correct to the best of my knowledge, information, and belief.



K. A. Ainger  
Director- Licensing  
Mid-West Regional Operating Group

Subscribed and sworn to before me, a Notary Public in and  
for the State above named, this 2<sup>nd</sup> day of  
August, 2001

  
Notary Public

**ATTACHMENT A**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 1 of 8**

**DESCRIPTION AND SAFETY ANALYSIS**  
**FOR THE PROPOSED TECHNICAL SPECIFICATIONS CHANGE**

**A. SUMMARY OF PROPOSED CHANGE**

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company (EGC), LLC, proposes a change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. NPF-11 and NPF-18. Specifically, the proposed change will temporarily modify TS Section 3.7.3, "Ultimate Heat Sink (UHS)," Surveillance Requirement (SR) 3.7.3.1. The current SR verifies that the temperature of the cooling water supplied to the plant from the Core Standby Cooling System (CSCS) pond is  $\leq 100$  °F every 24 hours. This request will modify SR 3.7.3.1 to allow continued operation of both units with CSCS pond temperature of  $\leq 103$  °F through September 30, 2001.

The proposed change is described in Section E of this Attachment. The marked up and retyped TS page is shown in Attachment B. The retyped TS Bases pages are also provided for informational purposes in Attachment B

**B. DESCRIPTION OF THE CURRENT REQUIREMENTS**

SR 3.7.3.1 verifies that the cooling water temperature supplied to the plant from the CSCS pond is  $\leq 100$  °F every 24 hours. With the temperature of the cooling water supplied to the plant from the CSCS pond  $> 100$  °F, the UHS must be declared inoperable in accordance with TS 3.7.3. TS 3.7.3, Required Action B.1, requires that both units must be placed in Mode 3 within 12 hours and Required Action B.2 requires that both units must be placed in Mode 4 within 36 hours.

**C. BASES FOR THE CURRENT REQUIREMENT**

The UHS provides a heat sink for processing and operating heat from safety related components during a transient or accident, as well as during normal operation. The Residual Heat Removal Service Water System (RHRSW) and Diesel Generator Cooling Water System (DGCW) are the principal safety systems that provide the heat rejection capability for the plant.

The UHS consists of an excavated CSCS pond integral with the cooling lake. The volume of the CSCS pond is sized to permit the safe shutdown and cooldown of both units for a 30-day period with no additional makeup water source available for normal and accident conditions. The UHS is the sink for heat removed from both units' reactor cores following all accidents and anticipated operational occurrences in which the units are cooled down and placed in Residual Heat Removal (RHR) operation. The function of the CSCS pond is to provide for cooling of the RHR heat

**ATTACHMENT A**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 2 of 8**

exchangers, diesel generator coolers, CSCS cubicle area cooling coils, RHR pump seal coolers, and Low Pressure Core Spray (LPCS) pump motor cooling coils. The CSCS pond provides indirect heat rejection for the containment through the RHR heat exchangers. The CSCS pond also provides a source of emergency makeup water for fuel pool cooling and water for fire protection equipment. Neither the ability to provide emergency makeup water for fuel pool cooling nor fire protection are limited by heat rejection considerations. The operating limits for heat rejection capability are based on conservative heat transfer analyses for the worst case loss of coolant accident (LOCA).

**D. NEED FOR REVISION OF THE REQUIREMENT**

Prolonged hot weather in the area has resulted in sustained elevated UHS water temperature. High temperature and humidity during the daytime, in conjunction with very little cooling at night and very little precipitation, have resulted in elevated water temperature in LaSalle County Station's UHS. Based on projected weather patterns, a temporary amendment is being sought. The proposed change is to increase the limit on the cooling water temperature supplied to the plant from the CSCS pond in SR 3.7.3.1 to  $\leq 103$  °F, corrected for sediment level and time of day through September 30, 2001.

**E. DESCRIPTION OF THE PROPOSED CHANGE**

EGC is seeking a temporary change to SR 3.7.3.1 that increases the maximum CSCS pond temperature limit to  $\leq 103$  °F. This revised limit will be in effect through September 30, 2001.

**F. SAFETY ANALYSIS OF THE PROPOSED CHANGES**

The UHS is the sink for heat removed from both units' reactor cores following all accidents and anticipated operational occurrences in which the units are cooled down and placed in RHR operation. The operating limits are based on conservative heat transfer analyses for the worst case LOCA. The UHS is designed in accordance with Regulatory Guide (RG) 1.27, "Ultimate Heat Sink for Nuclear Power Plants," Revision 2, dated January 1976, which requires a 30-day supply of cooling water in the UHS.

The following is a summary of the various heat-loads being supplied by the cooling water from the CSCS pond. An assessment was performed to determine the affect of elevated CSCS pond water temperatures on both units. The assessment utilized current heat exchangers, coolers, and chillers inspection data to ensure that margin is preserved (i.e., margin in fouling factors and number of tubes plugged) between the current condition and the evaluated condition. The assessment consisted of

**ATTACHMENT A**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 3 of 8**

engineering analyses and qualitative assessments of the effected components. The assessment determined the heat rejection capability margin with either 103 °F or 105 °F cooling water inlet temperature. The assessment determined that the most limiting component is the High Pressure Coolant Spray (HPCS) corner room (VY) coolers. The VY coolers are designed for 100°F inlet water temperature and had the least positive margin of the CSCS Corner Room coolers with elevated inlet temperature to 103 °F. The assessment demonstrated that operability of these components and equipment and containment integrity is maintained.

**Safety-Related Heat-Loads:**

- **RHR Heat Exchangers.** The RHR heat exchangers are the principal heat-load with a minimum required design flow of 7400 gallons per minute (gpm) per heat exchanger. There are two heat exchangers in each unit. The minimum required design heat rejection capabilities of each RHR heat exchanger is 155 E06 British thermal units per hour (Btu/hr). Actual historical performance demonstrated that considerable margin exists. Actual flow is 8600 gpm. An assessment of heat exchanger capacity was made using design bases flow of 7400 gpm. This assessment found that with an elevated inlet cooling water temperature of 105 °F the heat rejection capacity of the RHR heat exchangers was approximately 183 E06 Btu/hr. Based on an assessment with elevated temperatures and verification of actual performance, each of the RHR heat exchangers has sufficient margin to perform its safety functions with an elevated inlet temperature of 103 °F.
- **Diesel Generator Heat Exchangers.** The Diesel Generator heat exchangers have the next largest heat-load following the RHR heat exchangers. The minimum required design heat rejection capability for the diesel generator heat exchangers are 7.8 E06 Btu/hr for the HPCS diesel generators, and 8.6 E06 Btu/hr for the remaining diesel generators. Currently, none of the diesel generator heat exchangers have any material condition issues that would impair their ability to support an increase in inlet water temperature from 100 °F to 103 °F. An assessment of the diesel generator performance determined that with an inlet temperature of 105 °F, the heat rejection capability 8.54 E06 Btu/hr for the HPCS diesel generators, and approximately 9.66 E06 Btu/hr for all other diesel generators, exceeds the required heat rejection capability with adequate margin. This assessment demonstrates that the diesel generator heat exchangers have significant margin to perform their safety functions with elevated cooling water temperatures (i.e., 103 °F) to the inlet of the heat exchangers.
- **RHR Seal Coolers.** The seal coolers on both units are in excellent material condition and have significant margin between the actual flow of

**ATTACHMENT A**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 4 of 8**

16 gpm average, with the lowest at 15.5 gpm, and the minimum required design flow of 5 gpm. The coolers do not have any material condition issues that would impair their ability to support an increase in inlet water temperature from 100 °F to 105 °F. An assessment of the RHR seal coolers showed that significant margin exists to perform their safety functions with elevated cooling water temperatures (i.e., 103°F) to the inlet of the coolers.

- LPCS Pump Motor coolers. Each cooler was shown to have considerable margin between actual flow of 5 gpm and the minimum required design flow of 2 gpm. There are no cooler material condition issues that would impair their ability to support an increase in inlet water temperature from 100 °F to 105 °F. An assessment of the LPCS motor coolers showed that significant margin exists to perform their safety functions with elevated cooling water temperatures (i.e., 103°F) to the inlet of the coolers.
- CSCS Corner Room Coolers. At design flow and fouling conditions and 103 °F inlet water temperatures, the room coolers showed a positive margin ranging between 3% to 19% over required heat rejection capability. The HPCS Corner Room Cooler had the least positive margin. There are no cooler material condition issues that would impair their ability to support an increase in inlet water temperature from 100 °F to 103 °F.

Non-Safety Related Heat-Loads. There are three Non-Safety Related systems that draw cooling water from the lake. These are the circulating water system, the service water system, and the fire protection system.

- The circulating water system transfers heat from the main condenser to the lake. The consequences of the water inlet temperatures exceeding the 97.5 °F design temperature will result in increased condenser back pressure and temperature. This will ultimately result in de-rating either or both units to maintain turbine back pressure (i.e., main condenser vacuum) and temperature within acceptable values.
- The service water system transfers heat from the majority of balance-of-plant systems. The majority of heat exchangers (i.e., 47) supplied by service water were designed for inlet temperatures of 100 °F and 13 were designed for 95 °F. These 13 heat exchangers are associated with the Reactor Building Closed Cooling Water (RBCCW), Turbine Building Closed Cooling Water (TBCCW), and Fuel Pool Cooling (FC) systems. Since these heat exchangers experienced the largest increase over their original design temperature, they were evaluated. An assessment of actual heat exchanger performance on these three systems showed that all would perform acceptably at 103 °F.

**ATTACHMENT A**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 5 of 8**

An assessment of RBCCW performance demonstrated that adequate margin exists to increase the inlet water temperature to 103 °F. Actual required heat capacity of 20.24 E06 Btu/hr is significantly below the maximum design heat capacity of 40 E06 Btu/hr. Similarly, TBCCW actual required heat capacity of 7.4 E06 Btu/hr is below the maximum design heat capacity of 16 E06 Btu/hr. Both of these systems will be maintained below the design bases inlet water supply temperature of 110 °F.

The FC Heat Exchangers design heat rejection capacity was 14.5 E06 Btu/hr at a service water inlet design temperature of 95 °F and a 120 °F fuel pool temperature. As part of a 5% power uprate modification, the FC system safety design basis fuel pool temperature was changed to 140 °F at a service water inlet temperature of 100 °F.

An assessment of FC heat exchanger performance, based on an inlet temperature of 105 °F, was performed. The heat rejection capacity at an operating fuel pool temperature of 140 °F is estimated to be 20.6 E06 Btu/hr.

For the current pool, a conservative heat load from irradiated fuel stored in the fuel pool for the Unit 1 fuel pool is approximately 2.50 E06 Btu/hr, and the Unit 2 fuel pool is approximately 3.86 E06 Btu/hr. Significant margin exists to conclude that the bulk fuel pool temperature can be maintained at or below 140 °F with 105 °F inlet service water temperature.

An evaluation of the FC system's ability to cope with an emergency full reactor core off-load was also made. The Updated Final Safety Analysis Report (UFSAR) indicates a peak temperature for an emergency full core off-load of 151.3 °F. The heat rejection capacity for these "emergency off-load" conditions at a fuel pool temperature of 151.3 °F and a service water inlet temperature of 105 °F is estimated to be 56.8 E06 Btu/hr. The maximum heat generation rate for the emergency core off-load case is 55.4 E06 Btu/hr. The bulk fuel pool temperature can be maintained at or below 151.3 °F with 105 °F inlet service water (i.e., cooling water) even under these abnormal conditions.

The following is based on an assessment of UFSAR Chapter 6 for containment response analyses and UFSAR Chapter 15 for LOCA and non-LOCA analyses.

- For non-LOCA analyses, the assessment concluded that the 103°F elevated lake temperature would manifest itself in suppression pool temperatures for post-LOCA and the alternate shutdown-cooling event.

**ATTACHMENT A**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 6 of 8**

- For an Anticipated Trip Without Scram (ATWS) event, the safety evaluation (SE) issued for power uprate amendments lists a maximum suppression pool temperature of 204°F, a significant margin to the maximum design allowable temperature of 212°F. The results of a sensitivity study indicate for a 3 °F increase in CSCS pond temperature there would be a 2 - 3 °F increase in the peak suppression pool temperature. Based on the bounding 3°F increase in CSCS pond temperature the maximum suppression pool temperature is not expected to exceed 207 °F.
  
- For Station Blackout, postulating a service water temperature of 103 °F over the entire duration of the event will not significantly affect the peak suppression pool/drywell temperatures predicted in this event since no cooling is available until alternating current (AC) power is restored. The Station Blackout analysis discussed in UFSAR Section 15.9 is a beyond-the-design-basis event. This event requires the use of the RHR heat exchangers to remove decay heat from the suppression pool. The Station Blackout event analysis is performed assuming a complete loss of AC electrical power for a four-hour period. The coping analysis assumes operation of the Reactor Core Isolated Cooling (RCIC) and/or the HPCS system, but without crediting the HPCS diesel as an alternate AC source. Postulating a service water temperature of 103 °F over the entire duration of the event will not significantly affect the peak suppression pool/drywell temperatures predicted in this event since no cooling is available until AC power is restored. The effect of 103 °F service water temperature for the entire duration would then be to change the slope at which the temperature decreases, slightly increasing the time to cool down the suppression pool, drywell, and heating-and-air-condition loads, since the cooling effectiveness of the RHR heat exchangers is reduced slightly.

The remaining non-LOCA transients are independent of or unaffected by CSCS pond temperature assumptions.

- For LOCA analyses, UHS temperature is not used as an input to the peak clad temperature (PCT) calculation. The proposed temperature has no impact on LOCA analyses.
  
- For containment response analyses, the UHS temperature affects the assumptions for the RHR heat exchanger. A temperature of 100 °F is assumed for the cooling water supplied to the plant for cooling the RHR heat exchangers from the CSCS pond. An evaluation of RHR heat exchanger performance in the Containment Cooling mode was made with 105 °F inlet service water (i.e., cooling water). The assessment showed that with an inlet cooling water temperature of 105 °F the heat rejection

**ATTACHMENT A**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 7 of 8**

capacity of the RHR heat exchangers was approximately 183 E06 Btu/hr. This is considerable margin above the minimum required design heat rejection rate of 155 E06 Btu/hr. Additionally, several conservatisms were used in the assessment, including:

- (1) The model assumes that 5% of the heat exchanger tubes are plugged. Currently, the maximum number of tubes plugged in any of the RHR heat exchangers is less than 2.5%.
- (2) The overall fouling factor used in the assessment was twice that actually measured during the latest RHR heat exchanger performance testing.
- (3) The service water temperature used in the evaluation was 105 °F versus the requested 103 °F.

Therefore, the proposed temperature has no impact on the containment response analyses. The peak containment temperature and pressure and long term containment temperature profile used in the environmental qualification of systems, structures, and components remain unchanged.

The results of the assessment support a maximum inlet temperature of  $\leq 103$  °F. This assessment, summarized above, evaluated the operation of and the components needed to support operation of the various heat-loads supplied by the cooling water from the CSCS pond. These heat-loads include the RHR service water to the RHR heat exchangers, the Emergency Core Cooling System pumps (i.e., room coolers, RHR seal coolers and LPCS motor cooler), and the Emergency Diesel Generators. The support equipment includes oil coolers, room coolers, and jacket water cooling systems. The assessment showed that sufficient margin exists for each of the coolers and heat exchangers to perform their safety functions with an increase in the temperature of the cooling water supplied to the plant from the CSCS pond up to 103 °F.

The risk associated with continued operation with the temperature of the cooling water supplied to the plant from the CSCS pond at 103 °F was evaluated. Because the proposed temperature has been determined to be acceptable for the containment pressure response, LOCA and non-LOCA analyses, there is no increase in risk associated with post-accident heat removal. Additionally, no adverse influences on risk were identified through examination of the Probabilistic Risk Analysis (PRA) model for the plant.

**G. IMPACT ON PREVIOUS SUBMITTALS**

There is no impact on any outstanding submittals from LaSalle County Station.

**ATTACHMENT A**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 8 of 8**

**H. SCHEDULE REQUIREMENTS**

We request approval of the proposed change as soon as possible to avoid a potential shutdown of LaSalle County Station, Units 1 and 2. The average temperature of the UHS reached 98 °F on July 21, 2001. Continued hot weather conditions through the summer may result in the temperature exceeding the TS limit of 100 °F. We request this change be made effective immediately upon issuance and we intend to implement this proposed temporary change upon issuance until its expiration on September 30, 2001. Should the need for this amendment become urgent, we will request that the NRC process this amendment request on an exigent basis.

**ATTACHMENT B**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 1 of 1**

**MARKED-UP AND RETYPED TECHNICAL SPECIFICATION PAGE**  
**FOR THE PROPOSED CHANGE**

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.3.1 Verify cooling water temperature supplied to the plant from the CSCS pond is $\leq 100^{\circ}\text{F}$ .	24 hours
SR 3.7.3.2 Verify sediment level is $\leq 1.5$ ft in the intake flume and the CSCS pond.	24 months
SR 3.7.3.3 Verify CSCS pond bottom elevation is $\leq 686.5$ ft.	24 months

AFTER SEPTEMBER 30, 2001 ( $\leq 103^{\circ}\text{F}$   
THROUGH SEPTEMBER 30, 2001)

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.3.1      Verify cooling water temperature supplied to the plant from the CSCS pond is $\leq 100^{\circ}\text{F}$ after September 30, 2001 ( $\leq 103^{\circ}\text{F}$ through September 30, 2001).	24 hours
SR 3.7.3.2      Verify sediment level is $\leq 1.5$ ft in the intake flume and the CSCS pond.	24 months
SR 3.7.3.3      Verify CSCS pond bottom elevation is $\leq 686.5$ ft.	24 months

BASES (continued)

---

LCO OPERABILITY of the UHS is based on a maximum water temperature being supplied to the plant of 100°F after September 30, 2001 ( $\leq$  103°F through September 30, 2001) and a minimum pond water level at or above elevation 690 ft mean sea level. In addition, to ensure the volume of water available in the CSCS pond is sufficient to maintain adequate long term cooling, sediment deposition (in the intake flume and in the pond) must be  $\leq$  1.5 ft and CSCS pond bottom elevation must be  $\leq$  686.5 ft.

---

APPLICABILITY In MODES 1, 2, and 3, the UHS is required to be OPERABLE to support OPERABILITY of the equipment serviced by the UHS, and is required to be OPERABLE in these MODES.

In MODES 4 and 5, the OPERABILITY requirements of the UHS is determined by the systems it supports. Therefore, the requirements are not the same for all facets of operation in MODES 4 and 5. The LCOs of the systems supported by the UHS will govern UHS OPERABILITY requirements in MODES 4 and 5.

---

ACTIONS

A.1

If the CSCS pond is inoperable, due to sediment deposition  $>$  1.5 ft (in the intake flume, CSCS pond, or both) or the pond bottom elevation  $>$  686.5 ft, action must be taken to restore the inoperable UHS to an OPERABLE status within 90 days. The 90 day Completion Time is reasonable based on the low probability of an accident occurring during that time, historical data corroborating the low probability of continued degradation (i.e., further excessive sediment deposition or pond bottom elevation changes) of the CSCS pond during that time, and the time required to complete the Required Action.

B.1 and B.2

If the CSCS pond cannot be restored to OPERABLE status within the associated Completion Time, or the CSCS pond is determined inoperable for reasons other than Condition A (e.g., inoperable due to the temperature of the cooling water supplied to the plant from the CSCS pond  $>$  100°F after September 30, 2001 ( $>$  103°F through September 30, 2001), corrected for sediment level and time of day), the unit must

(continued)

---

BASES

---

ACTIONS

B.1 and B.2 (continued)

be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed in at least MODE 3 within 12 hours and in MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

---

SURVEILLANCE  
REQUIREMENTS

SR 3.7.3.1

Verification of the temperature of the water supplied to the plant from the CSCS pond ensures that the heat removal capabilities of the RHRSW System and DGCW System are within the assumptions of the DBA analysis. To ensure that the maximum design temperature of water supplied to the plant is not exceeded, the temperature during normal plant operation must be  $\leq 100^{\circ}\text{F}$  after September 30, 2001 ( $\leq 103^{\circ}\text{F}$  through September 30, 2001), corrected for sediment level and time of day the measurement is taken (Ref. 3). This is to account for the CSCS pond design requirement that it provide adequate cooling water supply to the plant for 30 days without makeup, while taking into account solar heat loads and plant decay heat during the worst historical weather conditions. In addition, since the lake temperature follows a diurnal cycle (it heats up during the day and cools off at night), the measured temperature must be corrected for the time of day the measurement is taken. The allowable temperatures, based on the actual sediment level and the time of day the measurement is taken, have been determined by analysis. The 24 hour Frequency is based on operating experience related to trending of the parameter variations during the applicable MODES.

SR 3.7.3.2

This SR ensures adequate long term (30 days) cooling can be maintained, by verifying the sediment level in the intake flume and the CSCS pond is  $\leq 1.5$  feet. Sediment level is determined by a series of sounding cross-sections compared to as-built soundings. The 24 month Frequency is based on historical data and engineering judgement regarding sediment deposition rate.

(continued)

---

**ATTACHMENT C**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 1 of 3**

**INFORMATION SUPPORTING A FINDING OF NO SIGNIFICANT HAZARDS  
CONSIDERATION**

Exelon Generation Company (EGC), LLC, has evaluated the proposed change and determined that it involves no significant hazards consideration. According to 10 CFR 50.92(c) a request is determined to involve no significant hazards consideration if operation of the facility is in accordance with the proposed request and would not:

- 1) Involve a significant increase in the probability of occurrence or the consequences of an accident previously evaluated; or
- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- 3) Involve a significant reduction in a margin of safety.

Technical Specification (TS) Section 3.7.3, "Ultimate Heat Sink (UHS)." Surveillance Requirement (SR) 3.7.3.1, verifies that the temperature of the cooling water supplied to the plant from the Core Standby Cooling System (CSCS) pond is  $\leq 100$  °F every 24 hours. EGC is seeking a temporary change to SR 3.7.3.1 that increases the maximum CSCS pond temperature limit to  $\leq 103$  °F. This revised limit will be in effect through September 30, 2001.

**A. The proposed change does not involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated.**

The requested change will allow the cooling water temperature supplied to the plant from the Core Standby Cooling System (CSCS) pond to be maintained  $\leq 103$  °F.

Analyzed accidents are assumed to be initiated by the failure of plant systems, structures, or components. An inoperable ultimate heat sink (UHS) is not considered as an initiator of any analyzed events. The analyses of record for LaSalle County Station, Units 1 and 2, assume an UHS temperature of 100 °F. Further assessment used a maximum temperature of 103 °F. This higher temperature does not have a significant impact on the loss of coolant accident (LOCA) analysis or containment analysis, and the non-LOCA analyses are unaffected. Therefore, continued operation with an UHS temperature  $\leq 103$  °F through September 30, 2001 will not increase the consequences of an accident previously evaluated in the Update Final Safety Analysis Report (UFSAR).

The basis provided in Regulatory Guide 1.27, "Ultimate Heat Sink for Nuclear Power Plants," Revision 2, dated January 1976, was employed for

**ATTACHMENT C**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 2 of 3**

the temperature analysis of the LaSalle County Station UHS to implement General Design Criterion (GDC) 2, "Design bases for protection against natural phenomena," and GDC 44, "Cooling water," of Appendix A to 10 CFR Part 50, "General Design Criteria for Nuclear Power Plants." The meteorological conditions chosen for the LaSalle County Station UHS analysis utilized a synthetic 36-day period consisting of the most severe five days, most severe one day, and the most severe 30 days based on historical data through 1995. The heat loads selected for the UHS analysis considered one LaSalle County Station unit in a LOCA condition concurrent with a loss of off-site power (LOOP) and the remaining LaSalle County Station unit undergoing a normal plant shutdown. In the analysis, these heat loads are removed by the UHS using only RHR pumps. The main condenser cooling pond is conservatively assumed not to be available at the start of the LOCA event and normal plant shutdown. The analysis shows that with an initial UHS temperature of  $\leq 103$  °F, the required heat loads can be met for 30 days without exceeding the design bases of the mitigation systems.

Based on the above facts and reasoning, it has been demonstrated that the increase of the temperature of the cooling water supplied to the plant from the CSCS pond to  $\leq 103$  °F at the start of the design basis event will allow each required heat exchanger to perform its safety functions. The heat exchangers will continue to provide sufficient cooling for the heat loads during the most severe 30-day period.

Therefore, increasing the temperature of the cooling water supplied to the plant from the CSCS pond from  $\leq 100$  °F to  $\leq 103$  °F in SR 3.7.3.1, has no impact on any analyzed accident. Raising this limit does not introduce any new equipment, equipment modifications, or any new or different modes of plant operation, nor does it affect the operational characteristics of any safety related equipment or systems. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

**B. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.**

The proposed change does not involve a physical alteration of the units. There is no change being made to the parameters within which the units are operated that is not bounded by the analyses. This proposed action will not alter the manner in which equipment operation is initiated, nor will the function demands on credited equipment be changed. No alteration in the procedures that ensure the units remain within analyzed limits is proposed, and no change is being made to procedures relied upon to respond to an off-normal event. As such, no new failure modes are being introduced. The proposed action does not alter assumptions made in the safety analysis.

**ATTACHMENT C**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 3 of 3**

Increasing the temperature of the cooling water supplied to the plant from the CSCS pond from  $\leq 100$  °F to  $\leq 103$  °F in TS 3.7.3 has no impact on safety related systems. Plant design is such that the RHR pumps on the unit undergoing the LOCA/LOOP conditions would start upon the receipt of a signal, and would load onto their respective Emergency Diesel Generators during the LOOP event. There are no specific procedural requirements concerning the shutdown of RHR pumps in the LOCA or LOOP recovery procedures. The eventual shutdown of one RHR pump on the LOCA/LOOP unit would most likely be performed at the discretion of the recovery team, based on RHR demand and plant configuration/conditions. For these reasons, it is assumed that the LOCA/LOOP unit will maintain the associated unit RHR pumps in operation for the entire 30-day UHS analysis period. The increase in the temperature of the cooling water supplied to the plant from the CSCS pond will not require operation of additional RHR pumps.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

**C. The proposed change does not involve a significant reduction in a margin of safety.**

The proposed change allows operation with the temperature of the cooling water supplied to the plant from the CSCS pond  $\leq 103$  °F through September 30, 2001. The margin of safety is determined by the design and qualification of the plant equipment, the operation of the plant within analyzed limits, and the point at which protective or mitigative actions are initiated. The proposed change does not impact these factors. There are no design changes or equipment performance parameter changes associated with this change. No setpoints are affected, and no change is being proposed in the plant operational limits as a result of this change. This temperature increase will not change the operational characteristics of the design of any equipment or system. All accident analysis assumptions and conditions will continue to be met. Thus, the proposed change does not involve a significant reduction in the margin of safety.

Therefore, based on the above assessment, EGC has concluded that this request does not involve a significant hazards consideration.

**ATTACHMENT D**  
**Proposed Technical Specification Change for**  
**LaSalle County Station, Units 1 and 2**  
**Page 1 of 1**

**INFORMATION SUPPORTING AN ENVIRONMENTAL ASSESSMENT**

EGC has evaluated this requested change against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. It has been determined that this requested action meets the criteria for a categorical exclusion as set forth in 10 CFR 51.22(c)(9) and as such, has determined that no irreversible consequences exist in accordance with 10 CFR 50.92(b). This determination is based on the fact that this change is being proposed as a temporary change to a license issued pursuant to 10 CFR 50 that reflects a requirement with respect to the use of a facility component located within the restricted area, as defined in 10 CFR 20, and the action meets the following specific criteria:

- (i) As demonstrated in Attachment C of this submittal, this proposed action does not involve a significant hazard consideration.
- (ii) There is no significant change in the types or significant increase in the amounts of any effluent that may be released offsite. The proposed change does not affect the generation of any radioactive effluent. The proposed change would allow the operation of LaSalle County Station, Units 1 and 2, with the temperature of the cooling water supplied to the plant from the CSCS pond  $\leq 103$  °F. The PRA risk assessment showed that there is not an increase in risk compared to the risk associated with a forced shutdown. It is expected that plant equipment would operate as designed in the event of an accident to minimize the potential for any leakage of radioactive effluents.
- (iii) There is no significant increase in individual or cumulative occupational radiation exposure. The proposed change will not change the level of controls or methodology used for processing of radioactive effluents or handling of solid radioactive waste, nor will the proposed action result in any change in the normal radiation levels within the plant. Therefore, there will be no increase in individual or cumulative occupational radiation exposure resulting from this change.