



January 20, 1997

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: LaSalle County Nuclear Power Station Units 1 and 2
Application for Amendment of Facility Operating Licenses NPF-11 and NPF-18, Appendix A, Technical Specifications, Relocation of alarm only instrumentation surveillance requirements and adding or changing an Action statement for selected Technical Specifications.
NRC Docket Nos. 50-373 and 50-374

Pursuant to 10 CFR 50.90, Commonwealth Edison Company (ComEd) proposes to revise Appendix A, Technical Specifications of Facility Operating Licenses NPF-11 and NPF-18, LaSalle County Station Units 1 and 2. The proposed changes include changes to the Technical Specifications (TS) to relocate selected indication/alarm only instrumentation surveillance requirements. The TS affected are TS 3/4.1.3.5, Control Rod Scram Accumulators; TS 3/4.4.3.2, Reactor Coolant System Operational Leakage; TS 3/4.5.1, Emergency Core Cooling Systems (ECCS) - Operating; TS 3/4.5.3, ECCS, Suppression Chamber; and 3/4.6.2.1, Suppression Chamber.

This proposed amendment request is subdivided as follows:

1. Attachment A gives a description and safety analysis of the proposed changes in this amendment.
2. Attachment B includes the marked-up License/Technical Specifications pages for LaSalle Units 1 and 2 with the requested changes indicated.
3. Attachment C describes ComEd's evaluation performed in accordance with 10 CFR 50.92 (c), which confirms that no significant hazard consideration is involved.
4. Attachment D provides an Environmental Assessment Applicability Review per 10 CFR 51.21.

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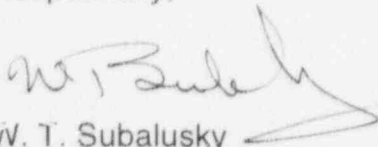
This proposed amendment has been reviewed and approved by ComEd On-Site and Off-Site Review in accordance with procedures.

ComEd requests approval of this amendment request as soon as reasonable, with an implementation time of 60 days.

Commonwealth Edison 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.

If there are any further questions or comments concerning this submittal, please refer them to Perry Barnes at (815) 357-6761, extension 2383.

Respectfully,



W. T. Subalusky
Site Vice President
LaSalle County Station

Enclosure

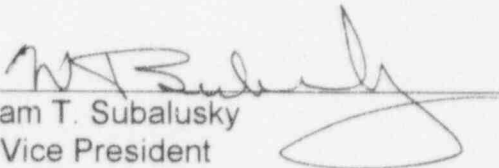
cc: A. B. Beach, NRC Region III Administrator
M. P. Huber, NRC Senior Resident Inspector - LaSalle
D. M. Skay, Project Manager - NRR - LaSalle
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DCD - Licensing (Hardcopy: Electronic:)
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COUNTY OF LASALLE)
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COM ED COMPANY)
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LASALLE COUNTY STATION - UNITS 1 & 2)

Docket Nos. 50-373
50-374

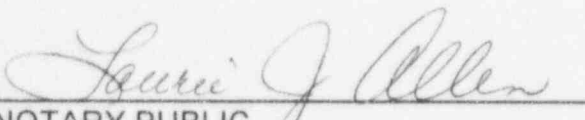
AFFIDAVIT

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


William T. Subalusky
Site Vice President
LaSalle County Station

Subscribed and sworn to before me,
a Notary Public in and for the State of
Illinois, this 20th day of January,
1997. My commission expires on
October 01, 2000.




NOTARY PUBLIC

ATTACHMENT A
DESCRIPTION OF SAFETY ANALYSIS OF THE PROPOSED CHANGES

Description of the Proposed Change

The proposed amendment involves multiple Technical Specifications (TS) changes. The changes involve the Surveillance Requirements of five TS concerning indicators/alarms that have no corresponding Action statements if the indication and/or alarms are not Operable. The instrumentation has no automatic or interlock type functions. These TS involve Surveillance Requirements (SRs) 4.1.3.5.b, 4.4.3.2.1, 4.5.1.d.1, 4.5.1.d.2.c), 4.5.3.1.b, and 4.6.2.1.c.3. These TS SRs, or portions of the TS SRs, are proposed to be relocated, rather than changed, because they are not required to be in the TS by any of the four criteria in 10CFR50.36(c)(2)(ii) and are not in NUREG 1434, Standard Technical Specifications.

This Technical Specification change is comprised of five sections as described below:

1. Control Rod Scram Accumulator TS SR 4.1.3.5.
2. Reactor Coolant System Operational Leakage TS SR 4.4.3.2.1.
3. ECCS - Operating TS SR 4.5.1.d.
4. TSs 3.5.3 and 3.6.2.1 both deal with the operability requirements for the suppression chamber.
5. Editorial change to TS 3.1.3.5 to correct a line indentation in the Unit 2 TS.

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1. Control Rod Scram Accumulator TS SR 4.1.3.5.

Description of the Current Operating License/Technical Specification Requirement (1)

Control Rod Scram Accumulator TS SR 4.1.3.5 is as follows:

"Each control rod scram accumulator shall be determined OPERABLE:

- a. "At least once per 7 days by verifying that the indicated pressure is greater than or equal to 940 psig unless the control rod is inserted and disarmed or scrambled.
- b. "At least once per 18 months by:
 1. "Performance of a:
 - a) "CHANNEL FUNCTIONAL TEST of the leak detectors, and
 - b) "CHANNEL CALIBRATION of the pressure detectors, with the alarm setpoint \geq 940 psig on decreasing pressure."

TS 3.1.3.5 has no action statement related to the instrumentation specified in TS SR 4.1.3.5.b.

Bases for the Current Requirement (1)

The Bases for TS 3.1.3, concerning Control Rod Scram Accumulators is as follows:

"Control rods with inoperable accumulators are declared inoperable and Specification 3.1.3.1 then applies. This prevents a pattern of inoperable accumulators that would result in less reactivity insertion on a scram than has been analyzed even though control rods with inoperable accumulators may still be inserted with

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normal drive water pressure. Operability of the accumulator ensures that there is a means available to insert the control rods even under the most unfavorable depressurization of the reactors."

The weekly surveillance verifies continued operability of the control rod accumulators according to UFSAR section 4.6.3. The 18 month refuel interval surveillances are related to the functional test and calibration of the instrumentation to provide accurate information to the unit operators concerning control rod status, however the Bases of the TS and the UFSAR do not discuss this TS SR.

Description of the Need for Amending the Technical Specification (1)

Because there are no appropriate action statements, inoperability of the CRD Accumulator alarm can place a Unit on either a shutdown action statement, or a very restrictive timeclock. Due to the design of the reactor manual control system (RMCS), accumulator alarm information is only provided to the control room, if RMCS is in operation in the scan mode (monitoring control rod status). If RMCS trips, then the status of CRD accumulator alarms is no longer updated, until the system is restored. Restoration of RMCS varies depending on the problem, but is generally less than a shift. Due to the complexity of the RMCS and the many inputs (status of 185 control rods), electronic card failures etc., although not frequent on a per card basis, still cause a trip of RMCS several times per year. Because the CRD accumulator alarm instrumentation has TS SRs, loss of RMCS makes CRD accumulator alarms inoperable per TS 4.0.1. Because there is no TS action specified for inoperable CRD accumulator alarm instrumentation, the CRD accumulators must be declared inoperable, placing the Unit in a shutdown action statement. Therefore this request for amendment is needed as soon as reasonable.

Description of the Amended Technical Specification Requirement (1)

TS SR 4.1.3.5.b concerning the control rod drive accumulator alarms is proposed to be deleted.

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Bases for the Amended Technical Specification Request (1)

The current TS requires performing a Channel Functional Test on the CRD accumulator leak detectors and the Channel Calibration of the CRD accumulator pressure detector indications and alarms. The instrumentation has no automatic or interlock functions. Whether or not the instrumentation is operable does not relate directly to the Operability requirements for the CRD accumulators. The BWR Standard Technical Specification NUREG 1434, Rev.1, does not specify indication only or alarm only instrumentation to be Operable to support Operability of a system or component. Control of the availability of and necessary compensatory activities if not available, for alarm and/or indication only instrumentation are in plant operation procedures. Therefore this instrumentation, along with supporting surveillances, is proposed to be relocated to plant procedures. Monitoring TS SR 4.1.3.5.a requires instrumentation to meet the surveillance requirement and thus if a control rod accumulator can not be determined to be greater than 940 psig, then the control rod must be declared inoperable. The local pressure indication for each accumulator is the normal means of satisfying this surveillance. The low pressure alarm is provided to assure the CRD accumulators remain charged between surveillances, but the weekly check of pressure is adequate without TS for the instrumentation used to satisfy the monitoring TS SR.

The instrumentation for accumulator leaks and pressure detection will continue to be maintained and calibrated as they are currently. Any changes to the procedures for the test/calibration of these instruments are made in accordance with 10CFR50.59.

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2. Reactor Coolant System Operational Leakage TS SR 4.4.3.2.1

Description of the Current Operating License/Technical Specification Requirement (2)

Reactor Coolant System Operational Leakage TS SR 4.4.3.2.1 is as follows:

4.4.3.2.1 "The reactor coolant system leakage shall be demonstrated to be within each of the above limits by:

- a. "Monitoring the primary containment atmospheric particulate and gaseous radioactivity at least once per 12 hours,
- b. "Monitoring the primary containment sump flow rate on average once per 8 hours not to exceed 12 hours, * and
- c. "Monitoring the primary containment air coolers condensate flow rate at least once per 12 hours."

* Technical Specification 4.0.2 does not apply.

TS 3.4.3.2 has no action statement related to the instrumentation specified in TS SR 4.4.3.2.1.

Bases for the Current Requirement (2)

The Bases for TS 3/4.4.3.2, Operational Leakage is as follows:

"The allowable leakage rates from the reactor coolant system have been based on the predicted and experimentally observed behavior of cracks in pipes. The normally expected background leakage due to equipment design and the detection capability of the instrumentation for determining system leakage was also considered. The evidence obtained from experiments suggests that for leakage somewhat greater than that specified for unidentified leakage the probability is small that the imperfection or crack associated with such leakage would grow rapidly. However, in all

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cases, if the leakage rates exceed the values specified or the leakage is located and known to be PRESSURE BOUNDARY LEAKAGE, the reactor will be shutdown to allow further investigation and corrective action.

"The Surveillance Requirements for RCS pressure isolation valves provide added assurance of valve integrity thereby reducing the probability of gross valve failure and consequent intersystem LOCA. Leakage from the RCS pressure isolation valves is IDENTIFIED LEAKAGE and will be considered as a portion of the allowed limit."

UFSAR section 5.2.5 discusses reactor coolant pressure boundary leakage limits and detection. Both quantitative and qualitative methods of leakage detection are listed. TS 3/4.4.3.1 requires certain reactor coolant system leakage detection systems to be Operable. TS 3/4.4.3.2 limits the amount of reactor coolant system leakage. The UFSAR is consistent with the TS Bases.

Description of the Need for Amending the Technical Specification (2)

There are no appropriate action statements related to the inoperability of the indications or systems used to periodically verify that Reactor Coolant System Operational Leakage is within the limits of TS 3.4.3.2. With a reactor coolant system leakage detection system inoperable per TS 3.4.3.1, monitoring an inoperable instrument per TS SR 4.4.3.2.1.a, b, or c could be interpreted to not meet the TS SR and thus not meet the TS LCO. This would place the Unit on a very restrictive timeclock. The monitoring TS SR 4.4.3.2.1 is meant to verify that reactor coolant system leakage is within limits at the required frequencies. If a required routine monitoring instrument is not available, then the appropriate actions are per TS 3.4.3.1, not TS 3.4.3.2. Therefore this request for amendment is needed to prevent the potential misinterpretation.

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Description of the Amended Technical Specification Requirement (2)

TS SR 4.4.3.2.1, which requires monitoring reactor coolant system leakage, is proposed to be changed to delete reference to the specific detection system indications required to be Operable per TS 3/4.4.3.1, Reactor Coolant System Leakage Detection Systems. The proposed wording is as follows:

4.4.3.2.1 "The reactor coolant system leakage shall be demonstrated to be within each of the above limits on average once per 8 hours not to exceed 12 hours. * "

* "Technical Specification 4.0.2 does not apply."

Bases for the Amended Technical Specification Request (2)

TS SR 4.4.3.2.1, concerning monitoring of reactor coolant system leakage, is changed to delete reference to the specific detection systems required to be Operable per TS 3/4.4.3.1, Reactor Coolant System Leakage Detection Systems. TS 3/4.4.3.1 provides the Limiting Conditions for Operation (LCO) , required actions if the LCO is not met, and SRs to assure operability of the reactor coolant system leakage detection systems. The proposed TS SR 4.4.3.2.1 assures that primary coolant system leakage remains within limits.

Current TS SR 4.4.3.2.1.b surveillance interval is based on LaSalle Unit 1 and Unit 2 license amendments 80 and 64, dated October 25, 1991 for Facility Operating Licenses NPF-11 and NPF-18, respectively (TAC numbers 80273 and 80274, respectively). The surveillance interval is "on average once per 8 hours, not to exceed 12 hours" and is modified by Note * making TS 4.0.2 not applicable to this surveillance requirement, because the interval is self-limiting. Upon detection of a 2 gpm increase in unidentified leakage within any 24 hour period, Action statement e of TS LCO 3.4.3.2 requires identification of the source of the leakage within 4 hours or be in Hot Shutdown within the next 12 hours and in Cold Shutdown within the following 24 hours.

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The surveillance frequency is being maintained. The method of monitoring reactor coolant system leakage is proceduralized and any changes to the procedures are made in accordance with 10CFR50.59. The list of leakage detection systems to monitor in the current TS SR 4.4.3.2.1 potentially causes confusion when a leakage detection system is inoperable, since TS 3/4.4.3.1 addresses the operability requirements for reactor coolant system leakage detection systems. The proposed wording is consistent with typical monitoring SRs in NUREG 1434, Rev. 1, and will allow inoperable reactor coolant system leakage detection systems to be properly handled through the LCO and Actions of TS 3/4.4.3.1.

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3. ECCS - Operating TS SR 4.5.1.d

Description of the Current Operating License/Technical Specification Requirement (3)

ECCS - Operating TS SR 4.5.1.d is as follows:

- d. "For the ADS by:
1. "At least once per 31 days, performing a CHANNEL FUNCTIONAL TEST of the accumulator backup compressed gas system low pressure alarm system.
 2. "At least once per 18 months:
 - a) "Performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence, but excluding actual valve actuation.
 - b) "Manually opening each ADS valve and observing the expected change in the indicated valve position.
 - c) "Performing a CHANNEL CALIBRATION of the accumulator backup compressed gas system low pressure alarm system and verifying an alarm setpoint of 500 + 40, - 0 psig on decreasing pressure."

TS 3.5.1 has no action statement related to the instrumentation specified in TS SRs 4.5.1.d.1 and 4.5.1.d.2.c).

Bases for the Current Requirement (3)

The Bases for TS 3/4.5.1 regarding ADS is as follows:

"Upon failure of the HPCS system to function properly, if required, the automatic depressurization system (ADS) automatically causes selected safety-relief valves to open,

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depressurizing the reactor so that flow from the low pressure core cooling systems can enter the core in time to limit fuel cladding temperature to less than 2200°F. ADS is conservatively required to be OPERABLE whenever reactor vessel pressure exceeds 122 psig even though low pressure core cooling systems provide adequate core cooling up to 350 psig.

"ADS automatically controls seven selected safety-relief valves. Six valves are required to be OPERABLE since the LOCA analysis assumes 6 ADS valves in addition to a single failure. It is therefore appropriate to permit one of the required valves to be out-of-service for up to 14 days without materially reducing system reliability."

UFSAR section 7.3.1.2 states that each ADS valve has an accumulator to store pneumatic energy for relief valve operation. The accumulator is designed to operate the safety/relief valve two times at 70% of drywell design pressure following failure of the pneumatic supply to the accumulator.

UFSAR section 6.3.2.2.2 is consistent with the TS Bases for ADS. UFSAR Section 5.2.2.4.1 states the following:

"The automatic depressurization system (ADS) utilizes selected safety/relief valves for depressurization of the reactor as described in Section 6.3, "Emergency Core Cooling System." Each of the safety/relief valves utilized for automatic depressurization is equipped with an air accumulator and check valve arrangement. These accumulators assure that the valves can be held open following failure of the air supply to the accumulators. They are sized to be capable of opening the valves and holding them open against the maximum drywell pressure of 45 psig. These accumulators are backed up by banks of nitrogen bottles with similar check valve arrangement to assure ADS operability through the cooldown decay heat removal period."

The response to NRC question numbers Q 212.89, Q 21.97, and Q 212.132 on the FSAR discuss the use of ADS valves for the "cooldown/decay heat removal period" as a backup due to the common shutdown cooling

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suction line, in order to meet single failure criterion for shutdown cooling. NUREG 0519, Safety Evaluation Report Related to the Operation of LaSalle County Station Units 1 and 2, dated March 1981, section 5.4.2 discusses ADS as backup for shutdown cooling. The backup pneumatic system (ADS nitrogen bottle banks) provide the safety-related pneumatic supply for long term cooling.

NUREG 0519 section 5.2.2 stated there were concerns regarding the reliability of the ADS valve accumulator check valves in an accident environment. The concern was resolved by providing the backup pneumatic system as a fully qualified long-term bottled air supply to the ADS valves. Section 5.2.2 refers to section 5.4.2 of NUREG 0519.

In addition, FSAR Appendix L documents the LaSalle positions referenced to the TMI Action Plan for Applicants for an Operating License (NUREG-0737 Enclosure 2), Item II.K.3.28. This TMI item involves qualification of accumulators on ADS valves. The LaSalle position documents the design of the ADS valve accumulators and the associated check valves, the normal drywell pneumatic system, and the ADS backup pneumatic system.

The basis stated in the UFSAR for the ADS accumulator backup compressed gas system low pressure alarm is to provide adequate time to obtain and replace low pressure nitrogen bottles with fully pressurized bottles.

Description of the Need for Amending the Technical Specification (3)

Because there are no appropriate action statements, operability of the ADS accumulator backup compressed gas system low pressure alarm can place a Unit in a shutdown action statement. The instrumentation has been unavailable on at least one occasion. If a required normal monitoring instrument is not available, then SR 4.5.1.d.2.a) and c) can not be satisfied and per TS 4.0.1, the ADS valves associated with the inoperable ADS accumulator backup compressed gas system low pressure alarm must currently be declared inoperable. With either 3 or 4

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ADS valves inoperable, TS 3.0.3 must be entered, which is not appropriate for loss of alarm and/or indication. Therefore this request for amendment is needed as soon as reasonable.

Description of the Amended Technical Specification Requirement (3)

TS SR 4.5.1.d.1 is proposed to be replaced by two monthly surveillances. One verifies ADS accumulator supply header pressure is ≥ 150 psig and the other verifies ADS accumulator backup compressed gas system bottle pressure is ≥ 500 psig. The proposed TS SRs are as follows:

(4.5.1.d)

1. "At least once per 31 days:
 - a) Verify ADS accumulator supply header pressure is ≥ 150 psig.
 - b) Verify ADS accumulator backup compressed gas system bottle pressure is ≥ 500 psig."

TS SR 4.5.1.d.2.c) is proposed to be deleted.

The proposed Action statement for ADS accumulator backup compressed gas system bottle pressure less than 500 psig is as follows:

- k. "With ADS accumulator backup compressed gas system bottle pressure less than 500 psig, restore ADS accumulator backup compressed gas system bottle pressure to greater than 500 psig within 72 hours or declare the associated ADS valves inoperable, and follow Action e of this specification."

The Bases of TS 3/4.5.1 is being updated to discuss the proposed SRs and Action statement k.

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Bases for the Amended Technical Specification Request (3)

The ADS accumulator backup compressed gas system pressure alarm instrumentation does not necessarily relate directly to ADS Operability. The BWR Standard Technical Specifications NUREG 1434, Rev.1, does not specify alarm only instrumentation to be Operable to support Operability of a system or component. Control of the availability of and necessary compensatory activities if not available, for alarm only instrumentation are in plant operation procedures. Therefore this instrumentation, along with supporting surveillances, is proposed to be relocated to plant procedures.

Because there is no surveillance currently in TS for the monitoring of the pneumatic supply to the ADS valves, two surveillances are being added to the TS. These surveillances assure that the ADS system will have adequate pneumatic pressure to open and pneumatic supply to remain open when required under accident conditions.

The ADS accumulator supply header pressure is supplied by the normal instrument nitrogen system, which has two compressors. This system supplies both the low pressure pneumatic supply header for other pneumatic equipment/components in the drywell and the two high pressure ADS accumulator supply headers. Maintaining the ADS valve accumulators at greater than or equal to 150 psig assures that the accumulators are pressurized to greater than or equal to 150 psig prior to the loss of the normal pneumatic supply. With an initial pressure of 150 psig, the accumulator for each ADS valve is designed to operate the safety/relief valve two times at 70% of drywell design pressure following failure of the pneumatic supply to the accumulator. TS SR 4.5.1.d.1.a assures that this initial condition is met. The proposed monthly frequency for this SR is adequate, because of the reliability of the normal pneumatic supply and multiple alarms that indicate the loss of the normal pneumatic supply. In addition, each ADS accumulator has a low pressure alarm in the control room which will signal when an ADS accumulator is less than 150 psig. This monitoring surveillance and the monthly frequency is consistent with the corresponding SR 3.5.1.3 in NUREG 1434, Rev. 1.

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The ADS accumulator backup compressed gas system is comprised of two separate bottle banks of nitrogen bottles, one bottle bank for each high pressure ADS accumulator supply header. One header supplies 3 ADS valve accumulators, the other header supplies the remaining 4 ADS valves. Each bank of the ADS accumulator backup compressed gas system has its own indication and alarm for low pressure. This is a backup system provided for long term availability of ADS during and following an accident and therefore is required to be Operable. The monitoring surveillance is being added to assure the continued Operability of ADS. The proposed monthly frequency for this SR is adequate, because each ADS bottle bank has a low pressure alarm. Also, unless the normal pneumatic supply is lost, the only losses from the bottles is through gas leakage, which is minimal.

The proposed Action statement for the ADS accumulator backup compressed gas system bottle pressure less than 500 psig is adequate, because this is a backup system for ADS valve accumulators. Also, the plant is unable to operate without the low pressure portion of the normal pneumatic supply to various components in the containment. The low pressure system is not required for any safety function regarding safe shutdown or accident or transient identification or mitigation, it is needed only for normal unit operation. The allowed outage time of 72 hours is reasonable based on the ADS valve accumulators remaining greater than 150 psig, or the ADS valves are inoperable. In addition, the 72 hours provides sufficient time to obtain full nitrogen bottle(s) and replace low pressure bottles with the full bottle(s).

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4. TSs 3.5.3 and 3.6.2.1 - Suppression Chamber

Description of the Current Operating License/Technical Specification Requirement (4)

TSs 3.5.3 and 3.6.2.1 both deal with the operability requirements for the suppression chamber.

- a. The ECCS - Suppression Chamber Action Statements c and d for TS 3.5.3 and SR 4.5.3.1.b are as follows:

TS 3.5.3 Actions c and d:

- c. "With one suppression chamber water level instrumentation channel inoperable, restore the inoperable channel to OPERABLE status within 7 days or verify the suppression chamber water level to be greater than or equal to -4 1/2 inches** or -12 feet 7 inches**, as applicable, at least once per 12 hours by local indication.
- d. "With both suppression chamber water level instrumentation channels inoperable, restore at least one inoperable channel to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours and verify the suppression chamber water level to be greater than or equal to -4 1/2 inches** or -12 feet 7 inches**, as applicable, at least once per 12 hours by local indication."

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Surveillance Requirements:

4.5.3.1 "The suppression chamber shall be determined OPERABLE by verifying:

- a. "The water level to be greater than or equal to, as applicable:
 - 1. "-4 1/2 inches** at least once per 24 hours.
 - 2. "-12 feet 7 inches** at least once per 12 hours.
- b. "Two suppression chamber water level instrumentation channels OPERABLE by performance of a:
 - 1. "CHANNEL CHECK at least once per 24 hours,
 - 2. "CHANNEL FUNCTIONAL TEST at least once per 31 days, and
 - 3. "CHANNEL CALIBRATION at least once per 18 months, with the low water level alarm setpoint at greater than or equal to -3 inches.**"

b. The Suppression Chamber Action Statements c and d for TS 3.6.2.1 and Surveillance Requirement TS SR 4.6.2.1.c are as follows:

TS 3.6.2.1 Actions c and d:

- c. "With one suppression chamber water level instrumentation channel inoperable and/or with one suppression pool water temperature instrumentation division inoperable, restore the inoperable instrumentation to OPERABLE status within 7 days or verify suppression chamber water level and/or temperature to be within the limits at least once per 12 hours by local indication.

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- d. "With both suppression chamber water level instrumentation channels inoperable and/or with both suppression pool water temperature instrumentation divisions inoperable, restore at least one inoperable water level channel and one water temperature division to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours."

Surveillance Requirement 4.6.2.1.c:

- c. "By verifying at least two suppression chamber water level instrumentation channels and at least 14 suppression pool water temperature instrumentation channels, 7 in each of two divisions, OPERABLE by performance of a:

1. "CHANNEL CHECK at least once per 24 hours,
2. "CHANNEL FUNCTIONAL TEST at least once per 31 days, and
3. "CHANNEL CALIBRATION at least once per 18 months.

"The suppression chamber water level and suppression pool temperature alarm setpoint shall be:

- a) "High water level \leq +2 inches*
- b) "Low water level \geq -3 inches*
- c) "High temperature \leq 105°F"

The TS 3.5.3 Actions c and d and TS 3.6.2.1 Actions c and d pertain to two channels of wide range suppression chamber water level instrumentation that are required to be Operable per TS 3.3.7.5, Accident Monitoring Instrumentation, Table 3.3.7.5-1, item 3. TS SRs 4.6.2.1.c, except for the high and low water level alarms, pertain to the same level instrumentation. Due to the wide range of the accident monitoring level instrumentation, the high and low

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level alarms are from narrow range level instruments. The narrow range level instruments are used for verifying that suppression chamber water level is between + 3 inches and - 4 1/2 inches (greater than -4 1/2 inches for TS 3.5.3). There are no Action statements that fit the narrow range instrumentation that must be used to meet TS SRs 4.5.3.1.a.1 and 4.6.2.1.a alarms.

In addition, TS 3.6.2.1.Actions c and d and TS SR 4.6.2.1.c also include two channels of suppression pool temperature instrumentation. This instrumentation is only for indication and alarm. The temperature indication is also required to be Operable per TS 3.3.7.5, Accident Monitoring Instrumentation.

Bases for the Current Requirement (4)

The Bases for TSs 3/4.5.3 and 3/4.6.2.1 are presented below.

- a. The Bases for ECCS - Suppression Chamber TS 3/4.5.3 are as follows:

"The suppression chamber is also required to be OPERABLE as part of the ECCS to ensure that a sufficient supply of water is available to the HPCS, LPCS and LPCI systems in the event of a LOCA. This limit on suppression chamber minimum water volume ensures that sufficient water is available to permit recirculation cooling flow to the core (See Figure B 3/4.6.2-1). The OPERABILITY of the suppression chamber in OPERATIONAL CONDITIONS 1, 2 or 3 is required by Specification 3.6.2.1.

"In OPERATIONAL CONDITION 4 and 5 the suppression chamber minimum required water volume is reduced because the reactor coolant is maintained at or below 200 °F. Since pressure suppression is not required below 212 °F, the minimum water volume is based on NPSH, recirculation volume, vortex prevention plus a 2' -4" [28"] safety margin for conservatism."

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The monitoring requirements help assure that the suppression chamber water level is adequate for the requirements of ECCS for the applicable Operational Conditions. The instrumentation SRs and associated Actions for inoperable instruments are not discussed in the bases of this TS.

- b. The Bases for Suppression Chamber TS 3/4.6.2.1, in part, are as follows:

"Because of the large volume and thermal capacity of the suppression pool, the volume and temperature normally changes very slowly and monitoring these parameters daily is sufficient to establish any temperature trends. By requiring the suppression pool temperature to be frequently recorded during periods of significant heat addition, the temperature trends will be closely followed so that appropriate action can be taken. The requirement for an external visual examination following any event where potentially high loadings could occur provides assurance that no significant damage was encountered."

Currently the TS SRs have requirements for monitoring suppression chamber level daily during Operational Conditions 1, 2, and 3. In addition, the monitoring instrumentation has TS 3.5.3 Actions c and d, TS 3.6.2.1 Actions c and d, for inoperable instruments and TS SRs 4.5.3.1.b and 4.6.2.1.c, for Channel Check, Channel Functional Test, and Channel Calibration. However, the two channels of suppression chamber water level instrumentation are wide range, accident monitoring instrumentation not suitable for narrow range level requirements during normal operating conditions. The post accident suppression chamber water level instruments are required to be Operable by TS 3.3.7.5, Accident Monitoring Instrumentation.

Normal operation monitoring of suppression chamber water level between -4.5" and +3" is satisfied with narrow range instruments. There are two safety related narrow range level indications. One is recorded in the main control room and provides the low level alarm. The other narrow range indication is an indicator at the remote shutdown panel (with no alarms), which is required to be Operable by TS 3.3.7.4, Remote Shutdown Monitoring Instrumentation. The suppression chamber high water level

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alarm is from two other suppression chamber level switches, which are safety-related, but do not provide level indication and are part of the Division 3 for electrical separation. In addition, there are two narrow range suppression chamber level gauges (sightglasses) that can be periodically read locally after being valved in, if the normal narrow range level indications are not available. Each of the narrow range level sightglasses is required to be isolated by two closed manual isolation valves on both the high and low ends of the sightglass per TS 3.6.3 and are verified closed monthly per TS SR 3.6.1.1.a.

Currently the TS SR 4.6.2.1.b has requirements for monitoring suppression chamber water temperature daily during Operational Conditions 1, 2, and 3 with special monitoring requirements during conditions that add heat to the suppression chamber. In addition, the suppression chamber water temperature monitoring instrumentation has TS 3.6.2.1 Actions c and d and TS SR 4.6.2.1.c for Channel Check, Channel Functional Test, and Channel Calibration.

Also, the suppression chamber water temperature indication instrumentation is currently required to be Operable by TS 3.3.7.5, Accident Monitoring Instrumentation. The same instrumentation is used for both normal and accident conditions due to the relatively narrow range of temperatures involved for both conditions.

Description of the Need for Amending the Technical Specification (4)

Because there are no appropriate action statements, inoperability of the suppression pool low water level alarms will place a Unit in action statement, which requires the instrument to be restored in eight hours or begin unit shutdown. The instrumentation has been unavailable on at least one occasion. If a required normal monitoring/alarm instrument is not available, then the only actions available require entry into restrictive action statements, which are not appropriate for loss of alarm and/or indication associated with a monitoring function. Therefore this request for amendment is needed as soon as reasonable.

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Description of the Amended Technical Specification Requirement (4)

The TS actions and TS SRs for suppression chamber water level and temperature instrumentation are proposed to be deleted from TS 3/4.5.3 and TS 3/4.6.2.1.

- a. The specific changes to TS 3/4.5.3 are as follows:
 - 1) TS 3.5.3 Actions c and d are proposed to be deleted.
 - 2) TS SR 4.5.3.1.b is proposed to be deleted.

- b. The specific changes to TS 3/4.6.2.1 are as follows:
 - 1) TS 3.6.2.1 Actions c and d are proposed to be deleted as follows:
 - c. Deleted.
 - d. Deleted.
 - 2) TS SR 4.6.2.1.c is proposed to be deleted as follows:
 - c. Deleted.

Bases for the Amended Technical Specification Request (4)

The current TS SRs 4.5.3.1.b and 4.6.2.1.c require Channel Checks, Channel Functional Tests, and Channel Calibrations of suppression chamber level instrumentation and alarms. In addition, TS SR 4.6.2.1.c requires these surveillance tests for the suppression chamber temperature indications and alarms. Also, both TS have actions for the instrumentation that is not directly related to the Operability of the suppression chamber. The instrumentation has no automatic or interlock functions. Whether or not the instrumentation is operable does not relate directly to the Operability requirements for the suppression chamber. The BWR Standard Technical Specification NUREG 1434, Rev.1, does not specify indication only or alarm only instrumentation to be Operable to

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support Operability of a system or component. Control of the availability of and necessary compensatory activities if not available, for alarm and/or indication only instrumentation are in plant operation procedures. Therefore this instrumentation, along with supporting surveillances and the required actions, is proposed to be relocated to plant procedures. Monitoring TS SRs 4.5.3.1.a and 4.6.2.1 require instrumentation to meet the surveillance requirement and thus if the suppression chamber can not be determined to be within the level limits and/or temperature limits, then the suppression chamber level and/or temperature must be assumed to have exceeded the associated limits and the appropriate action statement entered. There are multiple indications of suppression chamber level and temperature for satisfying the monitoring surveillances. The alarms are provided to identify changing parameters between surveillances, but the daily check of level and temperature is adequate to assure operability due to the large volume of water in the suppression chamber and the time required to significantly change the level or temperature during normal conditions.

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5. Editorial Change to TS 3.1.3.5

Description of the Current Operating License/Technical Specification Requirement (5)

The shutdown statement in the last line of Unit 2 TS 3.1.3.5, Action a.2 is indented differently than the shutdown statement of Unit 1 TS 3.1.3.5, Action a.2.

Bases for the Current Requirement (5)

The last sentence of Unit 2 TS 3.1.3.5 Action a.2, "Otherwise, be in at least HOT SHUTDOWN within 12 hours.", is indented incorrectly. The indentation of the same statement in the Unit 1 TS 3.1.3.5 Action a.2 is correct. The current Unit 2 indentation would indicate that the statement, "Otherwise, be in at least HOT SHUTDOWN within 12 hours.", is directly tied to the first statement in action a, "In OPERATIONAL CONDITION 1 or 2:". The indentation of Unit 1 TS 3.1.3.5 (shutdown statement in action a.2) is correct, because Action a.1 already has a shutdown statement associated with it. Unit 2 TS 3.1.3.5 Action a.2 is proposed to be corrected to be like Unit 1 TS 3.1.3.5.

Description of the Need for Amending the Technical Specification (5)

Unit 2 TS 3.1.3.5 needs to be indented correctly to ensure correct application of the TS.

Description of the Amended Technical Specification Requirement (5)

The shutdown statement in the last line of Unit 2 TS 3.1.3.5 Action a.2 is proposed to be corrected to be indented like the same line in Unit 1 TS 3.1.3.5 Action a.2.

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Bases for the Amended Technical Specification Request (5)

The last sentence of Unit 2 TS 3.1.3.5 Action a.2, "Otherwise, be in at least HOT SHUTDOWN within 12 hours.", is indented incorrectly. The indentation of the same statement in the Unit 1 TS 3.1.3.5 Action a.2 is correct. The current Unit 2 indentation would indicate that the statement, "Otherwise, be in at least HOT SHUTDOWN within 12 hours.", is directly tied to the first statement in action a, "In OPERATIONAL CONDITION 1 or 2:". The indentation of Unit 1 TS 3.1.3.5 the shutdown statement in action a.2 is correct, because Action a.1 already has a shutdown statement associated with it. Unit 2 TS 3.1.3.5 Action a.2 is proposed to be corrected to be like Unit 1 TS 3.1.3.5.

The correction to the indentation of the last sentence of Unit 2 TS 3.1.3.5 Action a.2 to be like Unit 1 will assist in consistent use of the TS and is an editorial change.

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Bases for the Amended Technical Specification Request (Sections 1, 3, and 4)

The instrumentation Surveillance Requirements that are being relocated have been evaluated against the four criteria listed in 10CFR50.36(c)(2)(ii). None of the criteria applies to the TS SRs that are being relocated.

Criterion 1:

"Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary."

Evaluation of Criterion 1:

The instrumentation being relocated from TS is indication and/or alarm only instrumentation that does not detect and indicate a significant abnormal degradation of the reactor coolant pressure boundary. TS 3.4.3.1, Reactor Coolant System Leakage Detection systems, is not affected by this amendment request.

Criterion 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."

Evaluation of Criterion 2:

The affected TS involve process variables that are 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. As a result, there are monitoring surveillance requirements with limits to verify the process variables (parameters) for suppression chamber water level, and suppression chamber water temperature, and CRD scram accumulator pressure.

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However, the instrumentation used to monitor these process variables may be relocated from the TS, because it is the value of the parameter monitored that is assumed in initial conditions of accidents or transients. The instruments serve no active function in an accident or transient. The instrumentation is maintained/calibrated/tested in accordance with station procedures. If a process variable can not be verified to be within the limits specified in the TS, then the associated TS Action requirements must be entered and is assured by the monitoring TS SRs that are either in the TS or are proposed by this change.

A TS SR is being added to monitor the ADS Accumulator supply pressure. Although the ADS Accumulator backup compressed gas system bottle pressure is not clearly a process variable, it is significant enough that a monitoring surveillance requirement is proposed to be added to TS 3/4.5.1.

Criterion 3:

"A structure, system, or component 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."

Evaluation of Criterion 3:

This instrumentation in these specifications does not involve a structure, system, or component 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. The process variables that are monitored and the associated limits in the TS that are affected are discussed in the criterion 2 evaluation above. The process variables monitored assure that initial conditions of a design basis accident or transient are not outside of the assumed values and are not for the mitigation of the design basis accident or transient.

The only instrumentation that is part of this change that does meet this criterion is a portion of the available suppression chamber water level and temperature indications. These instruments do meet criterion 3, because

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they are Regulatory Guide 1.97 Category 1, Type A instruments that are required to be retained as Accident Monitoring Instrumentation per TS 3/4.3.7.5. TS 3/4.3.7.5 currently requires the Category 1, Type A, Regulatory Guide 1.97 instrumentation to be Operable and TS 3/4.3.7.5 is not being changed by this amendment request.

Criterion 4:

"A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Evaluation of Criterion 4:

The instrumentation requirements that are being removed do not involve a structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. This has been verified against the LaSalle PSA and operating experience.

Therefore, this instrumentation, along with the supporting Actions and Surveillances, are proposed to be relocated to plant procedures. Changes to the relocated requirements in plant procedures will be controlled in accordance with 10CFR50.59.

Schedule

Due to the potential for the LaSalle units entering a short allowed outage time that could require a unit shutdown, this amendment is requested to be approved as soon as reasonable.