

Commonwealth Edison Company  
LaSalle Generating Station  
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April 12, 2000

United States Nuclear Regulatory Commission  
Attention: 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 Appendix A,  
Technical Specifications, Section 3/4.5.1, "ECCS-Operating,"  
Action C

In accordance with 10 CFR 50.90, "Application for Amendment of License or Construction Permit," Commonwealth Edison (ComEd) Company proposes changes to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. NPF-11 and NPF-18. Specifically, we propose to change TS Section 3/4.5.1, "ECCS-Operating," Action c, and its associated Bases Section.

The proposed changes revise for Units 1 and 2, TS Section 3/4.5.1, Action c, to be consistent with the design of the Reactor Core Isolation Cooling (RCIC) System. The RCIC System has a steam turbine driven pump that requires a minimum steam pressure for operability. The current wording of TS Section 3/4.5.1 does not account for the RCIC System not being required to be operable when the reactor steam dome pressure is less than or equal to 150 pounds per square inch, gauge (psig). The proposed changes are consistent with the requirements of TS Section 3/4.7.3, "Reactor Core Isolation Cooling System," which requires the RCIC System to be operable in Operational Conditions 1, "Power Operation," 2, "Startup," and 3, "Hot Shutdown," with the reactor steam dome pressure greater than 150 psig. Additionally, these proposed changes are consistent with NUREG 1434, "Standard Technical Specifications General Electric Plants, BWR/6," Revision 1.

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The information supporting the proposed changes is subdivided as follows:

- 1) Attachment A gives a description and safety analysis of the proposed changes.
- 2) Attachment B includes the marked-up TS pages with the proposed changes indicated.
- 3) Attachment C describes our 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 changes have been reviewed by the LaSalle County Station Plant Operations Review Committee (PORC) and approved by Nuclear Safety Review Board (NSRB) in accordance with the Quality Assurance Program.

ComEd 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.

Should you have any questions concerning this letter, please contact Mr. Frank A. Spangenberg, III, Regulatory Assurance Manager, at (815) 357-6761, extension 2383.

Respectfully,



Charles G. Pardee  
Site Vice President  
LaSalle County Station

Attachments:

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

cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – LaSalle County Station

STATE OF ILLINOIS )  
IN THE MATTER OF )  
COMMONWEALTH EDISON COMPANY )  
LASALLE COUNTY STATION - UNIT 1 & UNIT 2 )

Docket Nos. 50-373  
50-374

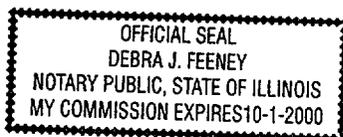
Subject: Application for Amendment to Appendix A, Technical  
Specifications, Section 3/4.5.1, "ECCS-Operating," Action C

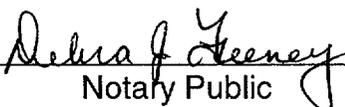
**AFFIDAVIT**

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

  
\_\_\_\_\_  
Charles G. Pardee  
Site Vice President  
LaSalle County Station

Subscribed and sworn to before me, a Notary Public in and for the State  
above named, this 12<sup>th</sup> day of April, 2000.  
My Commission expires on 10-1, 2000.



  
\_\_\_\_\_  
Notary Public

ATTACHMENT A  
Proposed Changes to the Technical Specifications for  
LaSalle County Station, Units 1 and 2  
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**DESCRIPTION AND SAFETY ANALYSIS  
FOR THE PROPOSED CHANGES**

**A. SUMMARY OF THE PROPOSED CHANGES**

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Commonwealth Edison (ComEd) Company proposes changes to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. NPF-11 and NPF-18. Specifically, we propose to change TS Section 3/4.5.1, "ECCS-Operating," Action c, and its associated Bases Section.

The proposed changes revise for Units 1 and 2, TS Section 3/4.5.1, Action c, to be consistent with the design of the Reactor Core Isolation Cooling (RCIC) System. The RCIC System has a steam turbine driven pump that requires a minimum steam pressure for operability. The current wording of TS Section 3/4.5.1 does not account for the RCIC System not being required to be operable when the reactor steam dome pressure is less than or equal to 150 pounds per square inch, gauge (psig). The proposed changes are consistent with TS Section 3/4.7.3, "Reactor Core Isolation Cooling System," which requires the RCIC System to be operable in Operational Conditions 1, "Power Operation," 2, "Startup," and 3, "Hot Shutdown," with the reactor steam dome pressure greater than 150 psig. Additionally, these proposed changes are consistent with NUREG 1434, "Standard Technical Specifications General Electric Plants, BWR/6," Revision 1.

The proposed changes are described in Section E of this Attachment. The marked up TS pages are shown in Attachment B.

**B. DESCRIPTION OF THE CURRENT REQUIREMENTS**

TS Section 3/4.5.1 requires that Emergency Core Cooling System (ECCS) Divisions 1, 2 and 3 be operable. This requirement is applicable in Operational Conditions 1, 2 and 3.

The operability of ECCS Division 3 is based on an operable High Pressure Core Spray (HPCS) System with a flow path capable of taking suction from the suppression chamber and transferring the water through the spray sparger to the reactor core.

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Proposed Changes to the Technical Specifications for  
LaSalle County Station, Units 1 and 2  
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If ECCS Division 3 is determined to be inoperable, Action c requires that Division 3 be restored to operable status within fourteen days, provided that ECCS Division 1, ECCS Division 2 and the RCIC System are operable during this fourteen day period. If these conditions can not be met and the plant is in Operational Conditions 1, 2 or 3, then the plant must be placed in Hot Shutdown within twelve hours and in Cold Shutdown within the following 24 hours.

**C. BASES FOR THE CURRENT REQUIREMENTS**

The ECCS consists of a HPCS System, Low Pressure Core Spray (LPCS) System, Low Pressure Coolant Injection (LPCI) Subsystems A, B and C, and an Automatic Depressurization System (ADS). The major components and function are as follows.

- The HPCS System consists of a single motor driven pump and associated valves, controls and instrumentation. The system is designed to spray water on top of the core in the Reactor Pressure Vessel (RPV) over the entire range of operating pressures.
- The LPCS System consists of a single motor driven pump and associated valves, controls and instrumentation. The system is designed to spray water on top of the core in the RPV when the primary system is at a low pressure.
- The LPCI System consists of three subsystems A, B and C. The LPCI Subsystems use the three Residual Heat Removal (RHR) System motor driven pumps and associated valves, controls and instrumentation. The system is designed to flood the core in the RPV when the primary system is at a low pressure.
- ADS is designed to reduce the RPV pressure to allow flow from the LPCS System and LPCI System to enter the RPV. The system consists of pressure relief valves, associated controls and instrumentation.

The RCIC System is the primary non-ECCS source of core cooling water when the RPV is pressurized and the reactor core is isolated from the feedwater system. The RCIC System consists of a steam turbine driven pump and associated valves, controls and instrumentation. TS Section 3/4.7.3 requires that the RCIC System be operable in Operational Conditions 1, 2 and 3 with the reactor steam dome pressure greater than 150 psig. TS Section 3/4.7.3 Bases states that the TS conservatively

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requires the RCIC System to be operable with the reactor steam dome pressure greater than 150 psig even though ECCS provides adequate core cooling for the full range of reactor pressure.

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

LaSalle County Station, Unit 1, performed a Noble Metals Injection procedure for the first time during its last refueling outage in October 1999. This procedure required the unit to operate the Reactor Coolant System (RCS) at a temperature of approximately 300 degrees Fahrenheit (F), which corresponds to an RPV pressure of approximately 70 psig for an extended period of time. The post evaluation of this procedure highlighted the inconsistency between TS Section 3/4.5.1, Action c, and TS Section 3/4.7.3. This inconsistency has the potential to require an unnecessary stopping of the Noble Metals Injection procedure if the HPCS System became inoperable. The plant would not be able to use TS Section 3/4.5.1, Action c, for an inoperable HPCS System as the RCIC System would be inoperable due to the low RPV pressure during Noble Metals Injection. LaSalle County Station, Unit 2, is scheduled to perform a Noble Metals Injection for the first time during its next refueling outage beginning in early November 2000.

**E. DESCRIPTION OF THE PROPOSED CHANGES**

The proposed changes revise for Units 1 and 2, TS Section 3/4.5.1, Action c, to read as follows (the changes are shown in italics).

- c. For ECCS division 3, provided that ECCS divisions 1 and 2 *are OPERABLE* and the RCIC system *is OPERABLE when required to be OPERABLE*:

In addition, the associated Bases Section is being changed accordingly. This change will remove the inconsistency between TS Section 3/4.5.1, Action c, and TS 3/4.7.3.

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Proposed Changes to the Technical Specifications for  
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**F. SAFETY ANALYSIS OF THE PROPOSED CHANGES**

The HPCS System is designed to spray water on top of the core in the RPV over the entire range of operating pressures. TS Section 3/4.5.1 requires that the HPCS System be operable in Operational Conditions 1, 2 and 3. In the event that the HPCS System is determined inoperable, TS Section 3/4.5.1, Action c, allows continued plant operation for fourteen days while the HPCS System is restored to operability, if the following are operable.

ECCS Division 1

- LPCS System
- LPCI Subsystem A
- 6 ADS Valves

ECCS Division 2

- LPCI Subsystem B
- LPCI Subsystem C
- 6 ADS Valves

RCIC System

TS Section 3/4.5.1 Bases states that with the HPCS System inoperable, adequate core cooling is assured by the operability of the redundant and diversified ADS, LPCS and LPCI Systems. Additionally, the Bases state that the HPCS System out of service time period of fourteen days is based on the demonstrated operability of the redundant and diversified low pressure core cooling systems.

The RCIC System is the primary non-ECCS source of core cooling water when the RPV is pressurized and the reactor core is isolated from the feedwater system. The RCIC System has a steam turbine driven pump that requires a minimum steam pressure for operability. TS Section 3/4.7.3 requires that the RCIC System is operable in Operational Conditions 1, 2 and 3 with the reactor steam dome pressure greater than 150 psig. TS Section 3/4.7.3 Bases states that the TS conservatively requires the RCIC System to be operable with the reactor steam dome pressure greater than 150 psig even though LPCI System provides adequate core cooling up to 350 psig.

The proposed changes will remove the inconsistency between TS Section 3/4.5.1, Action c, and TS 3/4.7.3. The proposed change to TS Section 3/4.5.1, Action c, will continue to require the Division 1 and 2 ECCS systems operable and fully capable of providing adequate core cooling at less than or equal to 150 psig.

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Proposed Changes to the Technical Specifications for  
LaSalle County Station, Units 1 and 2  
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Additionally, these proposed changes are consistent with NUREG 1434, Revision 1, "Standard Technical Specifications General Electric Plants, BWR/6." Standard TS Section 3/4.5.1, Required Action B, addresses an inoperable HPCS System and requires the verification by administrative means of the RCIC System operability when the RCIC System is required to be operable.

**G. IMPACT ON PREVIOUS SUBMITTALS**

We have reviewed the proposed changes regarding impact on any previous submittals including our Improved Standard Technical Specifications (ISTS) submittal of March 3, 2000 and have determined that there is no impact on any outstanding previous submittals.

**H. SCHEDULE REQUIREMENTS**

We request that this submittal be approved by October 1, 2000 to be implemented within 30 days to support the Noble Metals Injection at the beginning of the next refueling outage, currently scheduled for early November 2000.

ATTACHMENT B  
Proposed Changes to the Technical Specifications for  
LaSalle County Station, Units 1 and 2  
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**MARKED-UP TS PAGES FOR THE PROPOSED CHANGES**

**REVISED PAGES**

<u>NPF-11</u>	<u>NPF-18</u>
3/4 5-1*	3/4 5-1*
3/4 5-2	3/4 5-2
INSERT A	INSERT A
3/4 7-7*	3/4 7-7*
B 3/4 5-1*	B 3/4 5-1*
B 3/4 5-2	B 3/4 5-2

\* This page is provided for information only, no changes.

3/4.5 EMERGENCY CORE COOLING SYSTEMS

3/4.5.1 ECCS - OPERATING

LIMITING CONDITION FOR OPERATION

This page is included  
for information only, no  
changes

3.5.1 ECCS divisions 1, 2 and 3 shall be OPERABLE with:

a. ECCS division 1 consisting of:

1. The OPERABLE low pressure core spray (LPCS) system with a flow path capable of taking suction from the suppression chamber and transferring the water through the spray sparger to the reactor vessel.
2. The OPERABLE low pressure coolant injection (LPCI) subsystem "A" of the RHR system with a flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel.
3. At least 6 OPERABLE\*\* ADS valves.

b. ECCS division 2 consisting of:

1. The OPERABLE low pressure coolant injection (LPCI) subsystems "B" and "C" of the RHR system, each with a flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel.
2. At least 6 OPERABLE\*\* ADS valves.

c. ECCS division 3 consisting of the OPERABLE high pressure core spray (HPCS) system with a flow path capable of taking suction from the suppression chamber and transferring the water through the spray sparger to the reactor vessel.

APPLICABILITY: OPERATIONAL CONDITION 1, 2\*<sup>#</sup> and 3\*.

\*The ADS is not required to be OPERABLE when reactor steam dome pressure is less than or equal to 122 psig.

\*\*See Specification 3.3.3 for trip system operability.

<sup>#</sup>See Special Test Exception 3.10.6.

## EMERGENCY CORE COOLING SYSTEMS

### LIMITING CONDITION FOR OPERATION (Continued)

#### ACTION:

a. For ECCS division 1, provided that ECCS divisions 2 and 3 are OPERABLE:

1. With the LPCS system inoperable, restore the inoperable LPCS system to OPERABLE status within 7 days.
2. With LPCI subsystem "A" inoperable, restore the inoperable LPCI subsystem "A" to OPERABLE status within 7 days.
3. With the LPCS system inoperable and LPCI subsystem "A" inoperable, restore at least the inoperable LPCI subsystem "A" or the inoperable LPCS system to OPERABLE status within 72 hours.
4. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. For ECCS division 2, provided that ECCS divisions 1 and 3 are OPERABLE:

1. With either LPCI subsystem "B" or "C" inoperable, restore the inoperable LPCI subsystem "B" or "C" to OPERABLE status within 7 days.
2. With both LPCI subsystems "B" and "C" inoperable, restore at least the inoperable LPCI subsystem "B" or "C" to OPERABLE status within 72 hours.
3. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours\*.

c. For ECCS division 3, provided that ECCS divisions 1 and 2 and the RCIC system are OPERABLE:

Replace  
with  
INSERT 'A'

1. With ECCS division 3 inoperable, restore the inoperable division to OPERABLE status within 14 days.
2. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

\*Whenever two or more RHR subsystems are inoperable, if unable to attain COLD SHUTDOWN as required by this ACTION, maintain reactor coolant temperature as low as practical by use of alternate heat removal methods.

ATTACHMENT B  
Proposed Changes to the Technical Specifications for  
LaSalle County Station, Units 1 and 2

**INSERT A**

- c. For ECCS division 3, provided that ECCS divisions 1 and 2 are OPERABLE and the RCIC system is OPERABLE when required to be OPERABLE:

PLANT SYSTEMS

3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM

LIMITING CONDITION FOR OPERATION

This page is included  
for information only,  
no changes

3.7.3 The reactor core isolation cooling (RCIC) system shall be OPERABLE with an OPERABLE flow path capable of taking suction from the suppression pool and transferring the water to the reactor pressure vessel.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3 with reactor steam dome pressure greater than 150 psig.

ACTION:

- a. With a RCIC discharge line "keep filled" pressure alarm instrumentation channel inoperable, perform Surveillance Requirement 4.7.3.a.1 at least once per 24 hours.
- b. With the RCIC system inoperable, operation may continue provided the HPCS system is OPERABLE; restore the RCIC system to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to less than or equal to 150 psig within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.7.3 The RCIC system shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
  - 1. Verifying by venting at the high point vents that the system piping from the pump discharge valve to the system isolation valve is filled with water,
  - 2. Performance of a CHANNEL FUNCTIONAL TEST of the discharge line "keep filled" pressure alarm instrumentation, and
  - 3. Verifying that each valve, manual, power operated or automatic in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.
  - 4. Verifying that the pump flow controller is in the correct position.
- b. At least once per 92 days by verifying that the RCIC pump develops a flow of greater than or equal to 600 gpm in the test flow path with a system head corresponding to reactor vessel operating pressure when steam is being supplied to the turbine at 1000 + 20, - 80 psig.

\*The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the tests.

### 3/4.5 EMERGENCY CORE COOLING SYSTEM

*This page is included for information only, no changes*

#### BASES

#### 3/4.5.1 and 3/4.5.2 ECCS - OPERATING and SHUTDOWN

ECCS Division 1 consists of the low pressure core spray system, low pressure coolant injection subsystem "A" of the RHR system, and the automatic depressurization system (ADS) as actuated by ADS trip system "A". ECCS Division 2 consists of low pressure coolant injection subsystems "B" and "C" of the RHR system and the automatic depressurization system as actuated by ADS trip system "B".

The low pressure core spray (LPCS) system is provided to assure that the core is adequately cooled following a loss-of-coolant accident and provides adequate core cooling capacity for all break sizes up to and including the double-ended reactor recirculation line break, and for transients or smaller breaks following depressurization by the ADS.

The LPCS is a primary source of emergency core cooling after the reactor vessel is depressurized and a source for flooding of the core in case of accidental draining.

The surveillance requirements provide adequate assurance that the LPCS system will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation through a test loop during reactor operation, a complete functional test requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage to piping and to start cooling at the earliest moment. The low pressure setpoint allowable value for the discharge line "keep-filled" alarm is based on the head of water between the centerline of the pump discharge and the system high point vent.

The low pressure coolant injection (LPCI) mode of the RHR system is provided to assure that the core is adequately cooled following a loss-of-coolant accident. Three subsystems, each with one pump, provide adequate core flooding for all break sizes up to and including the double-ended reactor recirculation line break, and for transients or small breaks following depressurization by the ADS.

The surveillance requirements provide adequate assurance that the LPCI system will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation through a test loop during reactor operation, a complete functional test requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage to piping and to start cooling at the earliest moment. The low pressure setpoint allowable value for the discharge line "keep-filled" alarm is based on the head of water between the centerline of the associated pump discharge and the system high point vent.

## EMERGENCY CORE COOLING SYSTEMS

### BASES

#### 3/4.5.1 and 3/4.5.2 ECCS - OPERATING and SHUTDOWN (Continued)

ECCS Division 3 consists of the high pressure core spray system. The high pressure core spray (HPCS) system is provided to assure that the reactor core is adequately cooled to limit fuel clad temperature in the event of a small break in the reactor coolant system and loss of coolant which does not result in rapid depressurization of the reactor vessel. The HPCS system permits the reactor to be shut down while maintaining sufficient reactor vessel water level inventory until the vessel is depressurized. The HPCS system operates over a range of 1160 psid, differential pressure between reactor vessel and HPCS suction source, to 0 psid.

The capacity of the HPCS system is selected to provide the required core cooling. The HPCS pump is designed to deliver greater than or equal to 516/1550/6200 gpm at differential pressures of 1160/1130/200 psid. Water is taken from the suppression pool and injected into the reactor.

With the HPCS system inoperable, adequate core cooling is assured by the OPERABILITY of the redundant and diversified automatic depressurization system and both the LPCS and LPCI systems. In addition, the reactor core isolation cooling (RCIC) system, a system for which no credit is taken in the hazards analysis, will automatically provide makeup at reactor operating pressures on a reactor low water level condition. The HPCS out-of-service period of 14 days is based on the demonstrated OPERABILITY of redundant and diversified low pressure core cooling systems.

The surveillance requirements provide adequate assurance that the HPCS system will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation through a test loop during reactor operation, a complete functional test with reactor vessel injection requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage and to provide cooling at the earliest moment. The low pressure setpoint allowable value for the discharge line "keep-filled" alarm is based on the head of water between the centerline of the pump discharge and the system high point vent.

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

THE RCIC SYSTEM IS REQUIRED OPERABLE WHEN THE REACTOR STEAM DOME PRESSURE IS GREATER THAN 150 PSIG

3/4.5 EMERGENCY CORE COOLING SYSTEMS

3/4.5.1 ECCS - OPERATING

LIMITING CONDITION FOR OPERATION

This page is included  
for information only,  
no changes

3.5.1 ECCS divisions 1, 2 and 3 shall be OPERABLE with:

a. ECCS division 1 consisting of:

1. The OPERABLE low pressure core spray (LPCS) system with a flow path capable of taking suction from the suppression chamber and transferring the water through the spray sparger to the reactor vessel.
2. The OPERABLE low pressure coolant injection (LPCI) subsystem "A" of the RHR system with a flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel.
3. At least 6 OPERABLE\*\* ADS valves.

b. ECCS division 2 consisting of:

1. The OPERABLE low pressure coolant injection (LPCI) subsystems "B" and "C" of the RHR system, each with a flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel.
2. At least 6 OPERABLE\*\* ADS valves.

c. ECCS division 3 consisting of the OPERABLE high pressure core spray (HPCS) system with a flow path capable of taking suction from the suppression chamber and transferring the water through the spray sparger to the reactor vessel.

APPLICABILITY: OPERATIONAL CONDITION 1, 2<sup>#</sup> and 3\*.

\*The ADS is not required to be OPERABLE when reactor steam dome pressure is less than or equal to 122 psig.

\*\*See Specification 3.3.3 for trip system operability.

#See Special Test Exception 3.10.6.

EMERGENCY CORE COOLING SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION:

- a. For ECCS division 1, provided that ECCS divisions 2 and 3 are OPERABLE:
1. With the LPCS system inoperable, restore the inoperable LPCS system to OPERABLE status within 7 days.
  2. With LPCI subsystem "A" inoperable, restore the inoperable LPCI subsystem "A" to OPERABLE status within 7 days.
  3. With the LPCS system inoperable and LPCI subsystem "A" inoperable, restore at least the inoperable LPCI subsystem "A" or the inoperable LPCS system to OPERABLE status within 72 hours.
  4. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. For ECCS division 2, provided that ECCS divisions 1 and 3 are OPERABLE:
1. With either LPCI subsystem "B" or "C" inoperable, restore the inoperable LPCI subsystem "B" or "C" to OPERABLE status within 7 days.
  2. With both LPCI subsystems "B" and "C" inoperable, restore at least the inoperable LPCI subsystem "B" or "C" to OPERABLE status within 72 hours.
  3. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours\*.
- c. For ECCS division 3, provided that ECCS divisions 1 and 2 and the RCIC system are OPERABLE:
1. With ECCS division 3 inoperable, restore the inoperable division to OPERABLE status within 14 days.
  2. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- d. For ECCS divisions 1 and 2, provided that ECCS division 3 is OPERABLE:
1. With LPCI subsystem "A" and either LPCI subsystem "B" or "C" inoperable, restore at least the inoperable LPCI subsystem "A" or inoperable LPCI subsystem "B" or "C" to OPERABLE status within 72 hours.

Replace with INSERT 'A'

\*Whenever two or more RHR subsystems are inoperable, if unable to attain COLD SHUTDOWN as required by this ACTION, maintain reactor coolant temperature as low as practical by use of alternate heat removal methods.

**ATTACHMENT B**  
Proposed Changes to the Technical Specifications for  
LaSalle County Station, Units 1 and 2

**INSERT A**

- c. For ECCS division 3, provided that ECCS divisions 1 and 2 are OPERABLE and the RCIC system is OPERABLE when required to be OPERABLE:

## PLANT SYSTEMS

### 3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM

*This page is included  
for information only,  
no changes*

#### LIMITING CONDITION FOR OPERATION

3.7.3 The reactor core isolation cooling (RCIC) system shall be OPERABLE with an OPERABLE flow path capable of taking suction from the suppression pool and transferring the water to the reactor pressure vessel.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3 with reactor steam dome pressure greater than 150 psig.

#### ACTION:

- a. With a RCIC discharge line "keep filled" pressure alarm instrumentation channel inoperable, perform Surveillance Requirement 4.7.3.a.1 at least once per 24 hours.
- b. With the RCIC system inoperable, operation may continue provided the HPCS system is OPERABLE; restore the RCIC system to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to less than or equal to 150 psig within the following 24 hours.

#### SURVEILLANCE REQUIREMENTS

4.7.3 The RCIC system shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
  1. Verifying by venting at the high point vents that the system piping from the pump discharge valve to the system isolation valve is filled with water,
  2. Performance of a CHANNEL FUNCTIONAL TEST of the discharge line "keep filled" pressure alarm instrumentation, and
  3. Verifying that each valve, manual, power operated or automatic in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.
  4. Verifying that the pump flow controller is in the correct position.
- b. At least once per 92 days by verifying that the RCIC pump develops a flow of greater than or equal to 600 gpm in the test flow path with a system head corresponding to reactor vessel operating pressure when steam is being supplied to the turbine at 1000 + 20, - 80 psig.

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\*The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the tests.

### 3/4.5 EMERGENCY CORE COOLING SYSTEM

*This page is included for information only, no changes*

#### BASES

#### 3/4.5.1 and 3/4.5.2 ECCS - OPERATING and SHUTDOWN

ECCS Division 1 consists of the low pressure core spray system, low pressure coolant injection subsystem "A" of the RHR system, and the automatic depressurization system (ADS) as actuated by ADS trip system "A". ECCS Division 2 consists of low pressure coolant injection subsystems "B" and "C" of the RHR system and the automatic depressurization system as actuated by ADS trip system "B".

The low pressure core spray (LPCS) system is provided to assure that the core is adequately cooled following a loss-of-coolant accident and provides adequate core cooling capacity for all break sizes up to and including the double-ended reactor recirculation line break, and for transients or smaller breaks following depressurization by the ADS.

The LPCS is a primary source of emergency core cooling after the reactor vessel is depressurized and a source for flooding of the core in case of accidental draining.

The surveillance requirements provide adequate assurance that the LPCS system will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation through a test loop during reactor operation, a complete functional test requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage to piping and to start cooling at the earliest moment. The low pressure setpoint allowable value for the discharge line "keep-filled" alarm is based on the head of water between the centerline of the pump discharge and the system high point vent.

The low pressure coolant injection (LPCI) mode of the RHR system is provided to assure that the core is adequately cooled following a loss-of-coolant accident. Three subsystems, each with one pump, provide adequate core flooding for all break sizes up to and including the double-ended reactor recirculation line break, and for transients or small breaks following depressurization by the ADS.

The surveillance requirements provide adequate assurance that the LPCI system will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation through a test loop during reactor operation, a complete functional test requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage to piping and to start cooling at the earliest moment. The low pressure setpoint allowable value for the discharge line "keep-filled" alarm is based on the head of water between the centerline of the associated pump discharge and the system high point vent.

## EMERGENCY CORE COOLING SYSTEMS

### BASES

#### 3/4.5.1 and 3/4.5.2 ECCS - OPERATING and SHUTDOWN (Continued)

ECCS Division 3 consists of the high pressure core spray system. The high pressure core spray (HPCS) system is provided to assure that the reactor core is adequately cooled to limit fuel clad temperature in the event of a small break in the reactor coolant system and loss of coolant which does not result in rapid depressurization of the reactor vessel. The HPCS system permits the reactor to be shut down while maintaining sufficient reactor vessel water level inventory until the vessel is depressurized. The HPCS system operates over a range of 1160 psid, differential pressure between reactor vessel and HPCS suction source, to 0 psid.

The capacity of the HPCS system is selected to provide the required core cooling. The HPCS pump is designed to deliver greater than or equal to 516/1550/6200 gpm at differential pressures of 1160/1130/200 psid. Water is taken from the suppression pool and injected into the reactor.

With the HPCS system inoperable, adequate core cooling is assured by the OPERABILITY of the redundant and diversified automatic depressurization system and both the LPCS and LPCI systems. In addition, the reactor core isolation cooling (RCIC) system, a system for which no credit is taken in the hazards analysis, will automatically provide makeup at reactor operating pressures on a reactor low water level condition. The HPCS out-of-service period of 14 days is based on the demonstrated OPERABILITY of redundant and diversified low pressure core cooling systems.

THE RCIC SYSTEM IS REQUIRED OPERABLE WHEN THE REACTOR STEAM DOME PRESSURE IS GREATER THAN 150 PSIG

The surveillance requirements provide adequate assurance that the HPCS system will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation through a test loop during reactor operation, a complete functional test with reactor vessel injection requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage and to provide cooling at the earliest moment. The low pressure setpoint allowable value for the discharge line "keep-filled" alarm is based on the head of water between the centerline of the pump discharge and the system high point vent.

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

ATTACHMENT C  
Proposed Changes to the Technical Specifications for  
LaSalle County Station, Units 1 and 2  
1 of 3

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

ComEd has evaluated the proposed changes and determined that they do not involve a significant hazards consideration. According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not:

Involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated;

Create the possibility of a new or different kind of accident from any previously analyzed; or

Involve a significant reduction in a margin of safety.

The proposed changes revise for Units 1 and 2, Technical Specification (TS) Section 3/4.5.1, "ECCS-Operating," Action c, to be consistent with the TS requirements for the Reactor Core Isolation Cooling (RCIC) System. The RCIC System has a steam turbine driven pump that requires a minimum steam pressure for operability. The current wording of TS Section 3/4.5.1 does not account for the RCIC System not being required to be operable when the reactor steam dome pressure is less than or equal to 150 pounds per square inch, gauge (psig). The proposed changes are consistent with the requirements of TS Section 3/4.7.3, "Reactor Core Isolation Cooling System," which requires the RCIC System to be operable in Operational Conditions 1, "Power Operation," 2, "Startup," and 3, "Hot Shutdown," with the reactor steam dome pressure greater than 150 psig.

The determination that the criteria set forth in 10 CFR 50.92 (c) is met for this amendment request is indicated below.

ATTACHMENT C  
Proposed Changes to the Technical Specifications for  
LaSalle County Station, Units 1 and 2  
2 of 3

**Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?**

The Reactor Core Isolation Cooling (RCIC) System is a non-Emergency Core Cooling System (ECCS) source of core cooling water when the Reactor Pressure Vessel (RPV) is pressurized and the reactor core is isolated from the feedwater system. The RCIC System is not assumed to be an initiator of any analyzed accident. Thus, the proposed changes do not significantly increase the probability of an accident previously evaluated.

The Technical Specifications (TS) conservatively require the RCIC System to be operable with the reactor steam dome pressure greater than 150 psig even though ECCS provides adequate core cooling for the full range of reactor pressure. Thus, the proposed changes do not impact core cooling and therefore, the proposed changes do not increase the consequences of an accident previously evaluated.

**Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed changes do not affect the operation or configuration of plant systems, structures or components. The proposed changes do not affect currently analyzed failure modes and do not introduce new failure modes.

Thus, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

**Does the change involve a significant reduction in a margin of safety?**

The ECCS consists of a High Pressure Core Spray (HPCS) System (i.e., Division 3), Low Pressure Core Spray (LPCS) System (i.e., Division 1), LPCI System (i.e., Divisions 1 and 2), and an Automatic Depressurization System (ADS) (i.e., Division 1 and 2). TS Section 3/4.5.1 requires that ECCS Divisions 1, 2 and 3 be operable. The operability of ECCS Division 3 is based on an operable HPCS System. Adequate core cooling for an inoperable HPCS System is assured by the operability of the redundant and diversified Division 1 and 2 ECCS. The current TS out of service time period for an inoperable HPCS System, fourteen days, is based on the operability of the redundant and diversified ECCS low pressure core cooling systems.

ATTACHMENT C  
Proposed Changes to the Technical Specifications for  
LaSalle County Station, Units 1 and 2  
3 of 3

The RCIC System is a non-ECCS source of core cooling water when the RPV is pressurized and the reactor core is isolated from the feedwater system. The proposed change to TS Section 3/4.5.1, Action c, will continue to require the Division 1 and 2 ECCS to be operable and fully capable of providing adequate core cooling at less than or equal to 150 psig reactor steam dome pressure.

Thus, the proposed changes do not involve a significant reduction in a margin of safety.

Therefore, based upon the above evaluation, ComEd has concluded that the proposed changes do not constitute a significant hazards consideration.

ATTACHMENT D  
Proposed Changes to Technical Specifications for  
LaSalle County Station, Units 1 and 2  
1 of 1

**INFORMATION SUPPORTING AN ENVIRONMENTAL ASSESSMENT**

ComEd has evaluated the proposed changes against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. ComEd has determined that the proposed changes meet the criteria for a categorical exclusion 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 an amendment to a license issued pursuant to 10 CFR 50 that changes a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or that changes an inspection or a surveillance requirement, and the proposed changes meet the following specific criteria.

- (i) The proposed changes involve no significant hazards consideration.

The proposed changes do not involve a significant hazards 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 changes will not change the types or significantly increase the amounts of any effluents released offsite.

- (iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The proposed changes will not result in changes in the operation or configuration of the facility. There will be no change in the level of controls or methodology used for processing of radioactive effluents or handling of solid radioactive waste, nor will the proposal 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 the proposed changes.