

Exelon Generation Company, LLC  
LaSalle County Station  
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December 21, 2001

10CFR50.55a(a)(3)

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:** LaSalle County Station Relief Requests PR-08 and PR-10, Alternates to the Examination Requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1989 Edition, Table IWC-2500-1

In accordance with 10 CFR 50.55a(a)(3), Exelon Generation Company (EGC), LLC, requests approval of proposed Relief Requests PR-08 and PR-10 for use at LaSalle County Station, Unit 1 and Unit 2. The basis of the relief request is that the proposed alternatives would provide an acceptable level of quality and safety.

Relief Request PR-08 requests approval to use an alternate to the examination requirements of American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1989 Edition, Table IWC-2500-1. LaSalle County Station proposes to credit the continuous pressure decay monitoring required by Technical Specification (TS) Surveillance Requirement (SR) 3.1.5.1 for the nitrogen side of the Control Rod Drive (CRD) Accumulators and associated piping.

Relief Request PR-10 also requests approval to use an alternate to the examination requirements of ASME Code, Section XI, Table IWC-2500-1. LaSalle County Station proposes to substitute the pressure decay testing on the Automatic Depressurization System (ADS) Accumulators and associated piping performed in accordance with technical surveillances LTS-500-18 "Unit 1 Main Steam Safety Relief Valve Operability" and LTS-500-19 "Unit 2 Main Steam Safety Relief Valve Operability."

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We request that the proposed relief requests be approved by July 1, 2002.

Should you have any questions concerning this letter, please contact  
Mr. William Riffer, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,

A handwritten signature in black ink, appearing to read "Charles G. Pardee". The signature is fluid and cursive, with a large initial "C" and "P".

Charles G. Pardee  
Site Vice President  
LaSalle County Station

Attachments: Attachment 1 Relief Request PR-08  
Attachment 2 Relief Request PR-10

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

**ATTACHMENT 1**

**RELIEF REQUEST PR-08**

**RELIEF REQUEST: PR-08  
REVISION 0**

**COMPONENT IDENTIFICATION**

Code Class: 2  
References: American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1989 Edition, Subsections Table IWC-2500-1  
Examination Category: C-H  
Item Number: C7.10, C7.20, C7.30, C7.40, C7.70, and C7.80  
Description: Alternate Pressure Testing of the Control Rod Drive (CRD) System Accumulators.  
Component Numbers: CRD accumulators and associated piping

**CODE REQUIREMENT**

ASME Section XI, paragraph IWC-2500, states that components shall be examined and pressure tested as specified in Table IWC-2500-1. Table IWC-2500-1 requires a VT-2 visual examination be performed during system pressure tests.

**CODE REQUIREMENT FROM WHICH RELIEF IS REQUESTED**

Relief is requested from the performance of system pressure tests and VT-2 visual examination requirements specified in Table IWC-2500-1 for the nitrogen side of the CRD System accumulators and associated piping.

**BASIS FOR RELIEF**

Pursuant to 10 CFR 50.55a(a)(3), relief is requested on the basis that the proposed alternatives provide an acceptable level of quality and safety.

LaSalle County Station, Units 1 and 2, Technical Specification (TS) Surveillance Requirement (SR) 3.1.5.1 requires each control rod scram accumulator pressure to be equal to or greater than 940 pounds per square inch, gauge (psig) for the control rod scram accumulator to be considered operable. The SR is required to be met whenever the unit is operating in Modes 1 and 2. The accumulator pressure is continuously monitored by system instrumentation and a surveillance is performed on a weekly basis that requires a physical walkdown of all CRD accumulators. The walkdown is intended to identify any system air leaks and negative trending in system pressure. The accumulators are isolated from the source of make up nitrogen, thus the continuous monitoring of the CRD accumulators currently functions as a pressure decay type test.

The accumulators are maintained at a pressure of approximately 1100 psig during operation. Should accumulator pressure fall below 1000 psig (- 15 psig), an alarm is received in the control room. The pressure drop for the associated accumulator is then recorded in the control room log, and the accumulator is recharged by station procedure LOP-RD-20, "Control Rod Accumulator Recharging/Water Removal." Other corrective actions, including soap bubble application to locate leakage or equipment repair are performed, as required, in accordance with the Corrective Action Program.

Since the monitoring of the nitrogen side of the accumulator at pressures consistent with the requirements of Table IWC-2500-1 is continuous; any degradation of the accumulator and associated piping would be detected by normal system instrumentation. The accumulators are normally passive components and are accessible to slow developing failure modes. Corrosion and tubing connection integrity are the primary modes of failure. Continuous monitoring will detect degrading conditions of individual accumulators due to these failure modes before similar detection by the code required examination. The continuous monitoring of the CRD accumulators and associated piping exceeds the code requirement of inspecting the system once per inspection period. The additional VT-2 visual examination performed once per inspection period would not provide an increase in safety, system reliability, or structural integrity. In addition, performance of a VT-2 visual would require applying a leak detection solution to 185 accumulators per unit in an elevated dose rate area. This results in radiation exposure (estimated 150-400 mrem) without any added benefit in the level of quality and safety. This inspection would not be consistent with As Low As Reasonably Achievable (ALARA) practices.

Relief is requested from the performance of system pressure tests and VT-2 visual examination requirements specified in Table IWC-2500-1 for the nitrogen side of the CRD System accumulators and associated piping on the basis that the requirements of SR 3.1.5.1 exceed the code required examinations.

### **PROPOSED ALTERNATE EXAMINATIONS**

As an alternate to the examination requirements of Table IWC-2500-1, LaSalle County Station will perform continuous pressure decay monitoring for the nitrogen side of the CRD accumulators and associated piping and a weekly surveillance in accordance with SR 3.1.5.1 that requires a physical walkdown of all CRD accumulators.

### **APPLICABLE TIME PERIOD**

Relief is requested for the second ten-year interval of the Inservice Inspection Program for LaSalle County Station Units 1 and 2.

**ATTACHMENT 2**

**RELIEF REQUEST PR-10**

**RELIEF REQUEST: PR-10  
REVISION 0**

**COMPONENT IDENTIFICATION**

Code Class: 2  
References: American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1989 Edition, Subsections Table IWC-2500-1  
Examination Category: C-H  
Item Number: C7.10, C7.20, C7.30, C7.40, C7.70, and C7.80  
Description: Alternate Pressure Testing of the Safety Relief Valve (SRV) Automatic Depressurization System (ADS) Accumulators  
Component Numbers: SRV ADS accumulators and associated piping

**CODE REQUIREMENT**

ASME Section XI, paragraph IWC-2500, states that components shall be examined and pressure tested as specified in Table IWC-2500-1. Table IWC-2500-1 requires a VT-2 visual examination be performed during system pressure tests.

**CODE REQUIREMENT FROM WHICH RELIEF IS REQUESTED**

Relief is requested from the performance of system pressure tests and VT-2 visual examination requirements specified in Table IWC-2500-1 for the SRV ADS accumulators and associated piping.

**BASIS FOR RELIEF**

Pursuant to 10 CFR 50.55a(a)(3), relief is requested on the basis that the proposed alternatives provide an acceptable level of quality and safety.

LaSalle County Station technical surveillances LTS-500-18 "Unit 1 Main Steam Safety Relief Valve Operability" and LTS-500-19 "Unit 2 Main Steam Safety Relief Valve Operability" perform operability testing of the main steam safety relief valves including the seven relief valves and accumulators per unit that are required to provide automatic depressurization. These surveillances are performed on a refueling outage frequency as a requirement of LaSalle County Station's Inservice Testing (IST) program. One specific test that these surveillances perform is a pressure decay test of the ADS accumulators, associated piping and valves. The pressure decay test is performed by isolating and pressurizing the ADS accumulators and associated piping to the nominal operating pressure (i.e., 100 pounds per square inch, gauge). The decay in pressure is then monitored through calibrated pressure measuring instrumentation. If the acceptable pressure decay criteria (5 pounds square inch, gauge decay within 2 hours) are exceeded, the surveillances identify appropriate troubleshooting steps to perform, including soap-bubble application to locate leakage.

The pressure decay test performed as part of LTS-500-18 and LTS-500-19 will identify any degradation of the ADS accumulators and associated piping. The volume tested by these surveillances encompasses the entire ASME Section XI code boundary. These surveillances are performed on a greater frequency than the required period frequency of Table IWC-2500-1 and the test pressure is consistent with the pressure requirements of Table IWC-2500-1. Thus, the testing performed during these surveillances will provide the same level of quality and safety as the pressure testing and VT-2 visual examination requirements of Table IWC-2500-1. The additional VT-2 visual examination performed once per inspection period would not provide an increase in safety, system reliability, or structural integrity. In addition, performance of a VT-2 visual examination would require applying a leak detection solution to seven accumulators per unit and associated piping in an elevated dose rate area with limited access. This results in radiation exposure (estimated 200-400 mrem) without any added benefit in the level of quality and safety. This inspection would not be consistent with As Low As Reasonably Achievable (ALARA) practices.

Relief is requested from the performance of system pressure tests and VT-2 visual examination requirements specified in Table IWC-2500-1 for the SRV ADS Accumulators and associated piping on the basis that existing LaSalle County Station surveillances provide an acceptable level of quality and safety.

#### **PROPOSED ALTERNATE EXAMINATIONS**

As an alternate to the examination requirements of Table IWC-2500-1, LaSalle County Station will perform pressure decay testing on the ADS Accumulators and associated piping every refueling outage in accordance with surveillance procedures LTS-500-18 for Unit 1 and LTS-500-19 for Unit 2.

#### **APPLICABLE TIME PERIOD**

Relief is requested for the second ten-year interval of the Inservice Inspection Program for LaSalle County Station Units 1 and 2.