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10 CFR 50.55a

RS-07-131

September 28, 2007

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

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

Subject: Request for Relief from ASME OM Code for the Third Inservice Testing Interval – RP-02

References:
1. Letter from S. Landahl (Exelon Generation Company, LLC) to USNRC, "Proposed Third Ten-year Interval Inservice Testing Relief Requests," dated September 29, 2006
2. Letter from J. Hansen (Exelon Generation Company, LLC) to USNRC, "Withdrawal of Request for Relief from ASME OM Code for the Third Inservice Testing Interval," dated September 4, 2007

In Reference 1, Exelon Generation Company, LLC, (EGC), requested approval of proposed alternatives to the American Society of Mechanical Engineers Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code), 2001 Edition through 2003 Addenda. These proposed alternatives (i.e., Relief Requests) concerned the LaSalle County Station Third Inservice Testing (IST) interval, which is scheduled to start on October 12, 2007.

On September 4, 2007, (Reference 2), EGC formally withdrew one of the four Relief Requests that were transmitted in the referenced letter. Specifically, EGC withdrew the following Relief Request:

- RP-02, "Water Leg Pump Comprehensive Test"

In accordance with 10 CFR 50.55a, "Codes and standards," paragraphs (a)(3)(i) and (a)(3)(ii), EGC requests NRC approval of the re-submittal of RP-02, "Water Leg Pump Comprehensive Test." The relief request is presented in the attachment to this letter.

EGC requests approval of this request by October 1, 2008. There are no regulatory commitments in this letter. Should you have any questions concerning this letter, please contact Alison Mackellar at (630) 657-2817.

Respectfully,

Patrick R. Simpson
Manager-Licensing

Attachment: Relief Request RP-02, "Water Leg Pump Comprehensive Test"

Attachment
Pump Relief Request - RP-02
Water Leg Pump Comprehensive Test
(Revision 0)

Proposed Alternative in Accordance with 10 CFR 50.55a(a)(3)(ii)

Hardship or Unusual Difficulty without Compensating Increase in Level of Quality and Safety

1. ASME Code Component(s) Affected

Pump	Description	Class	Category	Unit
1E22-C003	HPCS Water Leg Pump	2	Group A	1
1E21-C002	LPCS Water Leg Pump	2	Group A	1
1E12-C003	RHR Water Leg Pump	2	Group A	1
1E51-C003	RCIC Water Leg Pump	2	Group A	1
2E22-C003	HPCS Water Leg Pump	2	Group A	2
2E21-C002	LPCS Water Leg Pump	2	Group A	2
2E12-C003	RHR Water Leg Pump	2	Group A	2
2E51-C003	RCIC Water Leg Pump	2	Group A	2

2. Applicable Code Edition and Addenda

ASME OM Code 2001 Edition through 2003 Addenda

3. Applicable Code Requirement

ISTB-5123, Table ISTB-3000-1; Comprehensive pump flow tests

4. Reason for Request

ISTB-5123 requires the performance of Comprehensive pump testing of the parameters listed in Table ISTB-3000-1. Table ISTB-3000-1 includes the measurement of flow, and there are no existing flow instruments associated with these pumps. Installation of flow instruments would be a hardship or unusually difficulty without a compensating increase in the level of quality and safety.

The primary purpose of these pumps is to maintain the High Pressure Core Spray (HPCS), Low Pressure Core Spray (LPCS), Reactor Core Isolation Cooling (RCIC), and Residual Heat Removal (RHR) pump discharge lines filled to limit the potential for water hammer upon associated pump initiation. Once the supported pump (e.g., HPCS, RHR, etc.) is in operation, the associated water leg pump serves no further safety related function. The amount of flow delivered by each water leg pump is dependent upon each supported systems leakage rate. Each water leg pump is capable of delivering approximately 50 gpm. None of the listed water leg pumps have instrumentation installed in their discharge lines for measuring flow rates.

While flow measurement instrumentation is provided downstream of the water leg pumps branch connection to its associated support system, during power operation the water leg

pump is unable to generate sufficient pressure to flow through the associated flow element into the reactor vessel. Even if the water leg pump was capable of developing a head sufficient to inject into the reactor vessel during power operation, the flow measurement instrumentation, which is designed to measure flow developed by either a HPCS (0-8000 gpm), LPCS (0-10,000 gpm), RHR (0-10,000 gpm) or RCIC (0-700 gpm) pump, is not capable of measuring such small flows developed by a water leg pump (i.e., approximately 50 gpm.)

The application of temporary flow instrumentation (ultrasonic) cannot be utilized, as there does not exist a run of piping long enough that would allow for an accurate measurement.

The Quarterly Group A testing as modified by LaSalle Pump Relief Request RP-01 will continue to be performed during the stipulated conditions that the RCS pressure is greater than the discharge pressure of the associated water leg pump, and that the supported system pump is not in operation during the testing of the associated water leg pump.

Comprehensive Pump testing prescribes that pump parameters are measured while the pump is operating at a flowrate within 20% of the pumps design flow. These water leg pumps do not have a safety related design flow rate. These pumps operate in a "keep ready" mode, maintaining the supported systems piping pressurized with water, which is dependent upon each individual systems leakage rate.

The remaining differences between Comprehensive Pump Testing and Group A testing is the accuracy of the instruments used in measuring the differential pressure (Table ISTB-3500-1) as well as the acceptance criteria associated with the pumps differential pressure (Table ISTB-5100-1).

These water leg pumps are tested quarterly by isolating them from their support system piping and measuring their pressure and vibration parameters as they flow through their minimum flow line, through a minimum flow orifice. As there is no flow measurement taken as a result of the system configuration, variation of the system resistance is not used.

The utilization of more accurate test instrumentation and acceptance criteria under these conditions would result in hardship without a compensating increase in the level of quality or safety.

5. Proposed Alternative and Basis for Use

LaSalle County Station will continue to monitor the subject pumps for degradation by measuring and recording pump inlet pressure, discharge pressure, (from which differential pressure is calculated), and vibration. The differential pressure and vibration data will be trended as directed by ISTB-5121 (Group A Test Procedure) as amended by Relief Request RP-01. These measurements are taken quarterly during normal plant operation, when the supported system's pump is not in operation and RCS pressure is greater than the water leg pumps discharge pressure. Measurement and trending of these parameters under these stated conditions will provide satisfactory indication of operational readiness as well as the ability to detect potential degradation. In addition, the main ECCS pump

headers each have a low pressure sensor which continuously monitors the operability of the respective water leg pump and alarms upon reaching their low setpoints. Technical Specification Surveillance Requirements (i.e., SR 3.5.1.1, SR 3.5.2.3 and SR 3.5.3.1) also verify operability of the water leg pumps by verifying flow through a high point vent on a monthly basis.

Vibration measurement will continue to be obtained under normal operating conditions and evaluated in accordance with ISTB-5121(d) and (e) (Group A Testing). The differential pressure across the pump will also continue to be determined quarterly through plant procedures utilizing each pumps minimum flow line in accordance with ISTB-5121(c) and (e). Differential Pressure and vibration will continue to be trended. In addition, LaSalle County Station verifies operability of these pumps through the continuous monitoring of the HPCS, LPCS, RHR and RCIC pump discharge line pressures that are monitored in the control room by alarm.

Comprehensive testing is not applicable as these pumps do not provide a safety related function beyond providing for the readiness of their supported system's pump and thus have no acceptance criteria for a comprehensive test.

6. Duration of Proposed Alternative

This proposed alternative will be utilized for the entire third 120 month interval.