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October 20, 1992

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Document Control Desk

Subject: LaSalle County Station Units 1 and 2
Deletion of the Steam Condensing Mode of the Residual Heat Removal (RHR) System
NRC Docket Nos. 50-373 and 50-374

References: (a) D.J. Chrzanowski (CECo) letter to Dr. Murley, dated September 5, 1991; Commonwealth Edison Response to Request for Additional Information (RAI) for Generic Letter 89-10 Supplement 3

(b) R.J. Barrett letter to T.J. Kovach, dated April 16, 1992; Response to Generic Letter 89-10, Supplement 3: "Consideration of the Results of NRC-Sponsored Tests of Motor-Operated Valves"

(c) Unit 2 Technical Specification License Condition 2.C(15)(i), High/Low Pressure Interface Between Reactor Core Isolation Cooling (RCIC) and Residual Heat Removal (RHR)

(d) C.W. Schroeder (CECo) letter to H.R. Denton (USNRC), dated March 1, 1984; Fire Protection System Analysis of RCIC/RHR High/Low Pressure Interface

(e) NUREG-0519 Supplement 8, Safety Evaluation Report related to the operation of LaSalle County Station, Units 1 and 2, dated March 1984

Dear Dr. Murley:

The Residual Heat Removal (RHR) system on both Units at LaSalle County Station is designed to operate in a number of different modes, one of which is the steam condensing mode. This system configuration is designed to be used when the primary system is isolated from the main condenser. Steam at reactor pressure and temperature is routed through the Reactor Core Isolation Cooling (RCIC) steam supply line to the RHR heat exchanger. The resultant condensate is then returned to either the RCIC pump suction or to the suppression pool. This mode of operation is further described in UFSAR sections 5.4.6.3 and 5.4.7.2.2.3, and shown on Piping and Instrumentation Drawings M-101 sheet 1 and M-96 sheet 4 for Unit 1, and M-147 sheet 1 and M-142 sheet 4 for Unit 2.

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When in the steam condensing mode, the RCIC outboard motor-operated valve 1E51-F064/2E51-F064 is open. However, during design reviews in response to Generic Letter 89-10 Supplement 3, Consideration of the Results of NRC-Sponsored Tests of Motor-Operated Valves, it was determined that the valves would be incapable of closing during a line break scenario coincident with a degraded voltage condition. As a result, valves 1E51-F064 and 2E51-F064 were taken out of service in the closed position. These valves are considered non-deficient while out-of-service closed, as shown in Attachment 1 to reference (a). In order for the valves to be considered non-deficient while in the steam condensing mode, valve replacement, actuator replacement, and gear change/closing time extension would be required. With valves 1E51-F064 or 2E51-F064 open in Operating Condition 4 for alternate shutdown cooling, engineering calculations performed for Generic Letter 89-10 Supplement 3 determined that the valves were operable and non-deficient.

Utilization of the steam condensing mode of RHR in Operating Conditions 1, 2, or 3 is not used at LaSalle due to concerns on potential water hammer and subsequent equipment damage. Alternate methods of decay heat removal exist and are routinely used. Commonwealth Edison (CECo) has performed a Safety Evaluation in accordance with 10CFR50.59, which documented the acceptability of deleting steam condensing as a mode of RHR while in Operating Conditions 1, 2, or 3. The UFSAR and station procedures will be revised to reflect the results of this Safety Evaluation.

As LaSalle has decided not to use the steam condensing mode of RHR, valves 1(2)E51-F064 will be kept administratively closed with power removed when in Operating Conditions 1, 2, or 3. These valves may be opened in Operating Condition 4 for alternate shutdown cooling. With these administrative controls in place, valves 1E51-F064 and 2E51-F064 are considered non-deficient in all operating modes. No additional actions are necessary to restore design margin, and the proposed changes listed for these valves in Attachment 1 of reference (a) (valve replacement, actuator replacement, and gear change/time extension) will not be performed.

At the present time, valves 2E12-F087A and 1E12-F087A are kept closed administratively to comply with the reference (c) License Condition. As discussed in reference (d), valves 1E12-F087A/B (2E12-F087A/B), along with valves 1E51-F064 (2E51-F064) and 1E12-F052A/B (2E12-F052A/B) are the high/low pressure interface valves between RCIC and RHR. On Unit 2, a warm-up line containing valve 2E51-F091 bypasses valve 2E51-F064, and is also an interface valve. The reference (e) SER stated that License Condition 2.C(15)(i) was satisfied once power was administratively removed from one of the interface valves. The RCIC outboard isolation valve will be kept administratively closed with power removed when in Operating Conditions 1, 2, and 3. The administrative closure of 1E51-F064 and both 2E51-F064 and 2E51-F091 will now satisfy the License Condition, and the administrative controls may be removed from valves 1E12-F087A and 2E12-F087A. The UFSAR and station procedures will be revised to reflect this transfer.

Please direct any questions to this office.

Sincerely,

JoAnn Shields
Nuclear Licensing Administrator

cc: A.E. Davis, Regional Administrator - RIII
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