Exelon Generation
Quad Cities Generating Station
22710 206th Avenue North
Cordova, IL 61242-9740
Tel 309-654-2241

www.exeloncorp.com

Exelon Nuclear

August 29, 2001

SVP-01-093

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

Quad Cities Nuclear Power Station, Units 1 and 2
Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Technical Specifications Section 5.6.6,
Post Accident Monitoring Instrumentation Report

The purpose of this letter is to submit a Post Accident Monitoring Instrumentation Report as required by Quad Cities Nuclear Power Station (QCNPS) Technical Specifications (TS) Section 5.6.6, "Post Accident Monitoring (PAM) Instrumentation Report."

On July 21, 2001, operating personnel were conducting surveillance QCOS 0250-01, "MSIV Closure Scram Sensor Channel Functional Test," on Unit 1 in accordance with TS Section 3.3.1.1. During this test the indication for the 1D inboard Main Steam Isolation Valve (MSIV) did not return to the expected full open position (both the closed and open position remained lit). During the test, the Reactor Protection System function, which occurs when the valve reaches the 10% closed position, worked properly and the MSIV was verified to return to the full open position utilizing secondary control room indications.

This discrepancy required entry into TS Section 3.3.3.1, "Post Accident Monitoring (PAM) Instrumentation," Condition A. This is due to an inoperable indication channel for Function 6 in Table 3.3.3.1-1, "Penetration Flow Path PCIV Position." Condition A requires restoration of the required indication channel to an operable status within 30 days, or initiate reporting requirements in accordance with TS Section 5.6.6, "Post Accident Monitoring (PAM) Instrumentation Report."

Resolution of this issue within the 30-day requirement was not feasible due to the significant power reduction and containment entry required to complete the necessary repairs. For this reason, QCNPS is submitting this report in accordance with TS Section 5.6.6. Accordingly, the attached report outlines the preplanned alternate method of monitoring and the apparent cause of the inoperability along with the plans and schedule for restoring the instrument channel to an operable status.

A001

Should you have any questions concerning this letter, please contact Mr. W. J. Beck at (309) 227-2800.

Respectfully,

Timothy J. Tulon
Site Vice President
Quad Cities Nuclear Power Station

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station
Office of Nuclear Facility Safety - Illinois Department of Nuclear Safety

Post Accident Monitoring (PAM) Instrumentation Report
Inoperable Channel For Penetration Flow Path PCIV Position

Preplanned Alternate Method of Monitoring

An alternate method of monitoring the isolation function of the 1D inboard Main Steam Isolation Valve (MSIV) has been implemented. The alternate method requires operating personnel, following an isolation signal, to verify:

(1) The red (OPEN) indication light is extinguished (i.e., the valve is closed) on control room panel 901-3 vertical and desk sections, and

(2) Verify that the flow indication for the D main steam line on control room panel 901-5 is zero.

This guidance has been communicated to operating personnel and is attached to station procedure QCOS 1600-05, "Post Accident Monitoring Instrumentation Outage Report." These actions provide an acceptable means of alternate indication to ensure the MSIV isolation function has been accomplished. Note that the 1 D MSIV indication anomaly has been entered into the Unit 1 degraded equipment log.

It also should be noted that the outboard MSIV position indication is fully functional.

Apparent Cause of the Inoperability

Based on the observations when cycling the 1D MSIV, attendant steam plant indications changed in a manner consistent with the valve partially closing and then returning to the full open position. Additionally, testing confirmed that the Reactor Protection System function of this MSIV is operable and not affected by this discrepancy. Quad Cities Station has reasonable assurance, based upon the RPS actuation and main steamline flow indications, that the 1D MSIV is open greater than 90% and is in the full open position. The most likely cause is a faulty position switch located in the drywell. This type of limit switch has been known to fail in the past due to problems such as flat areas on the follower or excessive wear of the follower axle. There is no practical testing that can be performed without a significant power reduction and a containment entry to confirm the origin of this dual indication discrepancy.

Plans and Schedule for Returning Function to Operable Status

Quad Cities Station will restore the 1D MSIV indication channel to an operable status during the next refueling outage on Unit 1 (Q1R17), scheduled for October 2002 or at the next Unit 1 forced outage which requires a drywell entry to return the unit to service.