May 5, 2003

Mr. John L. Skolds, President
Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: QUAD CITIES NUCLEAR POWER STATION UNITS 1 AND 2 - PUBLIC NOTICE OF APPLICATION FOR AMENDMENT TO FACILITY OPERATING LICENSES (TAC NOS. MB8711 AND MB8712)

Dear Mr. Skolds:

The enclosed announcement was forwarded to the Quad City Times for publication. This announcement relates to your application dated April 25, 2003, for an amendment to Facility Operating License Nos. DRP-29 and DRP-30. The proposed amendments would modify Technical Specifications Surveillance Requirements to provide an alternative means of testing the Unit 2 main steam power operated relief valves, including those that provide the automatic depressurization and the low set relief functions.

Sincerely,

/RA/

Carl F. Lyon, Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

Enclosure: Public Notice

cc w/encl: See next page

Quad Cities Nuclear Power Station Units 1 and 2

cc:

Site Vice President - Quad Cities Nuclear Power Station
Exelon Generation Company, LLC
22710 206th Avenue N.
Cordova, IL 61242-9740

Quad Cities Nuclear Power Station Plant Manager
Exelon Generation Company, LLC
22710 206th Avenue N.
Cordova, IL 61242-9740

Regulatory Assurance Manager - Quad Cities
Exelon Generation Company, LLC
22710 206th Avenue N.
Cordova, IL 61242-9740

Quad Cities Resident Inspectors Office
U.S. Nuclear Regulatory Commission
22712 206th Avenue N.
Cordova, IL 61242

William D. Leech
Manager - Nuclear
MidAmerican Energy Company
P.O. Box 657
Des Moines, IA 50303

Vice President - Law and Regulatory Affairs
MidAmerican Energy Company
One River Center Place
106 E. Second Street
P.O. Box 4350
Davenport, IA 52808

Chairman
Rock Island County Board of Supervisors
1504 3rd Avenue
Rock Island County Office Bldg.
Rock Island, IL 61201

Regional Administrator
U.S. NRC, Region III
801 Warrenville Road
Lisle, IL 60532-4351

Illinois Department of Nuclear Safety
Office of Nuclear Facility Safety
1035 Outer Park Drive
Springfield, IL 62704

Document Control Desk-Licensing
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Senior Vice President - Nuclear Services
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Vice President
Mid-West Operations Support
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Senior Vice President
Mid-West Regional Operating Group
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Vice President - Licensing and Regulatory Affairs
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Director - Licensing
Mid-West Regional Operating Group
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Senior Counsel, Nuclear
Mid-West Regional Operating Group
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Manager Licensing - Dresden and Quad Cities
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

May 5, 2003

Mr. John L. Skolds, President
Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: QUAD CITIES NUCLEAR POWER STATION UNITS 1 AND 2 - PUBLIC NOTICE OF APPLICATION FOR AMENDMENT TO FACILITY OPERATING LICENSES (TAC NOS. MB8711 AND MB8712)

Dear Mr. Skolds:

The enclosed announcement was forwarded to the Quad City Times for publication. This announcement relates to your application dated April 25, 2003, for an amendment to Facility Operating License Nos. DRP-29 and DRP-30. The proposed amendments would modify Technical Specifications Surveillance Requirements to provide an alternative means of testing the Unit 2 main steam power operated relief valves, including those that provide the automatic depressurization and the low set relief functions.

Sincerely,
/RA/

Carl F. Lyon, Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265
Enclosure: Public Notice

cc w/encl: See next page

DISTRIBUTION:

PUBLIC	P. Coates
PDIII-2 r/f	F. Lyon
J. Zwolinski/T. Marsh	OGC
W. Ruland	ACRS
A. Mendiola	M. Ring, RIII

ADAMS Accession Number: ML031200070

Office	PM:PDIII-2	LA:PDIII-2	SC:PDIII-2
Name	FLyon	PCoates	AMendiola
Date	4/30/03	4/30/03	4/30/03

OFFICIAL RECORD COPY

PUBLIC NOTICE

NRC STAFF PROPOSES TO AMEND OPERATING LICENSES AT THE

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

The U.S. Nuclear Regulatory Commission (NRC) staff has received an application dated April 25, 2003, from Exelon Generation Company, LLC, for an exigent amendment to the operating licenses for the Quad Cities Nuclear Power Station, Units 1 and 2 (QCNPS), located in Rock Island County, Illinois.

The proposed changes modify the Technical Specification (TS) Surveillance Requirements (SRs) to provide an alternative means for testing the Unit 2 main steam power operated relief valves (PORVs), including those that provide the automatic depressurization and the low set relief functions. The proposed changes allow the testing of the PORVs such that full functionality is demonstrated either by overlapping tests or by cycling the valves. The 3B and 3E PORVs on Unit 2 are currently in a degraded condition due to suspected seat leakage, as evidenced by elevated tailpipe temperatures, and will be replaced in a maintenance outage scheduled to commence on May 8, 2003. The proposed changes allow the testing of the PORVs such that full functionality is demonstrated by overlapping tests instead of cycling the valves. On April 16, 2003, the 3B PORV inadvertently opened. Attempts to re-close the valve were unsuccessful, and Unit 2 was shutdown to replace the valve. The inability to re-close the valve was attributed to failure of the pilot assembly caused by steam cutting of the pilot seat. Following startup from the outage to replace the 3B PORV, the 3B and 3E PORVs exhibited high tailpipe temperatures. The high temperature on the 3E PORV occurred after the valve was cycled for post-maintenance testing. The 3B PORV exhibited an elevated tailpipe temperature prior to being cycled; however, the temperature increased after cycling for post-maintenance testing. These results are consistent with industry experience that manual actuation of main steam relief valves during plant operation can lead to increased seat leakage. Based on previous testing and temperature trends, the licensee concluded that the most likely

cause of the high tailpipe temperatures is leakage from the main valve disc and seat, rather than leakage from the pilot valve. PORV leakage from the main valve disc and seat has little safety significance, as long as the pilot valve retains its function and suppression pool temperature is maintained within TS limits. However, current leakage from the main seat of the 3B and 3E PORVs is of sufficient quantity to prevent detection of potential pilot valve leakage. Leakage from the pilot valve can eventually cause a PORV to fail open and cause the reactor to blow down to the suppression pool and depressurize. Licensee review of the tailpipe temperatures for the 3B PORV that failed shows an increasing trend from approximately 207°F on January 31, 2003, to approximately 214°F when the valve inadvertently opened. This data indicates that it took approximately two months for the pilot valve to degrade enough for the leakage to cause the main disc to open and blow down. Licensee discussions with the valve manufacturer, General Electric, and licensee valve specialists indicate that steam cutting of a pilot valve to the extent that leakage would compromise the operation of the valve is not expected to occur in less than 30 days. The 3B and 3E PORVs began to display elevated tailpipe temperatures on April 20, 2003. Given that the elevated temperatures eliminate the ability to monitor for pilot valve leakage, it cannot be ruled out as a contributor. Therefore, Unit 2 is currently within the 30 day window prior to the pilot valve being compromised. As a result, the licensee plans to shutdown on May 8, 2003, prior to the 30 days expiring, and replace the 3B and 3E PORVs. This is being done based on the increased potential for pilot valve leakage to cause an inadvertent opening of a PORV, and the subsequent inability to re-close the PORV, and our desire to minimize this type of event from recurring. The need for this license amendment was identified on April 23, 2003, as a result of evaluations performed to address the impact of the 3B and 3E elevated tailpipe temperatures. The licensee requested that the amendment be treated as an exigent amendment in accordance with

10 CFR 50.91(a)(6) because time does not permit the NRC to publish a *Federal Register* notice allowing 30 days for prior public comment, the requested amendment involves no significant hazards consideration, and the exigency could not have been avoided by the licensee.

The licensee and the NRC staff have evaluated the proposed changes with regard to the determination of whether or not a significant hazards consideration is involved. Operation of QCNPS in accordance with the proposed amendments will not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed changes modify SR 3.4.3.2, SR 3.5.1.10, and SR 3.6.1.6.1 to provide an alternative means for testing the main steam line relief valves, automatic depressurization system valves, and low set relief valves. Accidents are initiated by the malfunction of plant equipment, or the catastrophic failure of plant structures, systems, or components. The performance of relief valve testing is not a precursor to any accident previously evaluated and does not change the manner in which the valves are operated. The proposed testing requirements will not contribute to the failure of the relief valves nor any plant structure, system, or component. The licensee has determined that the proposed change in testing methodology provides an equivalent level of assurance that the relief valves are capable of performing their intended safety functions. The performance of relief valve testing provides assurance that the relief valves are capable of depressurizing the reactor pressure vessel (RPV). This will protect the reactor vessel from overpressurization and allow the combination of Low Pressure Coolant Injection and Core Spray systems to inject into the RPV as designed. The low set relief logic causes two low set relief valves to be opened at a lower pressure than the relief mode pressure setpoints and causes the low set relief valves to stay open longer, such that reopening of more than one valve is prevented on subsequent actuations. Thus, the low set relief function prevents excessive short duration relief valve cycles with valve actuation at the relief setpoint, which avoids induced thrust loads on the relief

valve discharge line for subsequent actuations of the relief valve. The proposed changes involve the manner in which the subject valves are tested, and have no affect on the types or amounts of radiation released or the predicted offsite doses in the event of an accident. The proposed testing requirements are sufficient to provide confidence that the relief valves are capable of performing their intended safety functions. In addition, a stuck open relief valve accident is analyzed in the QCNPS Updated Final Safety Analysis Report. Since the proposed testing requirements do not alter the assumptions for the stuck open relief valve accident, the radiological consequences of any accident previously evaluated are not increased. Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed amendments will not create the possibility of a new or different kind of accident from any previously analyzed. The proposed changes do not affect the assumed accident performance of the PORVs, nor any plant structure, system, or component previously evaluated. The proposed changes do not install any new equipment, and installed equipment is not being operated in a new or different manner. The proposed change in test methodology will ensure that the valves remain capable of performing their safety functions due to meeting the testing requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, with the exception of opening the valve following installation or maintenance for which a relief request has been submitted, proposing an acceptable alternative. No setpoints are being changed which would alter the dynamic response of plant equipment. Accordingly, no new failure modes are introduced. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

The proposed amendments will not involve a significant reduction in a margin of safety. The proposed changes will allow testing of the manual actuation electrical circuitry, including

the solenoid, without causing the relief valve to open. The relief valves will be manually actuated prior to installation in the plant. Therefore, all modes of relief valve operation will be tested prior to entering the mode of operation requiring the valves to perform their safety functions. The proposed changes do not affect the valve setpoint or the operational criteria that directs the relief valves to be manually opened during plant transients. There are no changes proposed which alter the setpoints at which protective actions are initiated, and there is no change to the operability requirements for equipment assumed to operate for accident mitigation. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Following an initial review of this application, the requested amendments have been evaluated against the standards in 10 CFR 50.92 and the NRC staff has made a proposed (preliminary) determination that the requested amendments involve no significant hazards considerations. The changes do not significantly increase the probability or consequences of any accident previously considered, nor create the possibility of an accident of a different kind, nor significantly decrease any margin of safety.

If the proposed determination that the requested license amendments involve no significant hazards consideration becomes final, the staff will issue the amendments without first offering an opportunity for a public hearing. An opportunity for a hearing will be published in the *Federal Register* at a later date and any hearing request will not delay the effective date of the amendments.

If the staff decides in its final determination that the amendments do involve a significant hazards consideration, a notice of opportunity for a prior hearing will be published in the *Federal Register* and, if a hearing is granted, it will be held before the amendments are issued.

Comments on the proposed determination of no significant hazards consideration may be (1) telephoned to Anthony J. Mendiola, Chief, Section 2, Project Directorate III, by collect call to 301-415-2466, or by facsimile to 301-415-3061, (2) e-mailed to AJM, or (3) submitted in writing to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555. All comments received by close of business on May 8, 2003, from 7:30 a.m. to 4:15 p.m. Federal workdays will be considered in reaching a final determination. A copy of the application may be examined electronically through the Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room link at the NRC Web site http://www.nrc.gov/reading-rm/adams.html and at the Commission's Public Document Room (PDR), located at One White Flint North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS, should contact the NRC PDR Reference staff by telephone at 1-800-397-4209, 301-415-4737, or by e-mail to pdr@nrc.gov.