

May 8, 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 - ISSUANCE OF  
EXIGENT AMENDMENTS RE: POWER OPERATED RELIEF VALVE TESTING  
(TAC NOS. MB8711 AND MB8712)

Dear Mr. Skolds:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 215 to Facility Operating License No. DPR-29 and Amendment No. 209 to Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application dated April 25, 2003. Your application included Relief Request RV-30D, which will be addressed by separate NRC correspondence.

The amendments modify Technical Specification 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 system and low set relief functions. You requested that these amendments be treated as exigent amendments in accordance with 10 CFR 50.91(a)(6).

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

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

Enclosures: 1. Amendment No. 215 to DPR-29  
2. Amendment No. 209 to DPR-30  
3. Safety Evaluation

cc w/encls: See next page

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Carl F. Lyon, Project Manager, Section 2  
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cc w/encls: See next page

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EXELON GENERATION COMPANY, LLC

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 215  
License No. DPR-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated April 25, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-29 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 215, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Anthony J. Mendiola, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 8, 2003

EXELON GENERATION COMPANY, LLC

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 209  
License No. DPR-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated April 25, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-30 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 209, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

**/RA/**

Anthony J. Mendiola, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 8, 2003

ATTACHMENT TO LICENSE AMENDMENT NOS. 215 AND 209

FACILITY OPERATING LICENSE NOS. DPR-29 AND DPR-30

DOCKET NOS. 50-254 AND 50-265

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by number and contain marginal lines indicating the area of change.

Remove Pages

3.4.3-2  
3.5.1-6  
3.6.1.6-2

Insert Pages

3.4.3-2  
3.5.1-6  
3.6.1.6-2

The following Technical Specification Bases pages are provided for information only:

B 3.4.3-6  
B 3.4.3-7  
B 3.4.3-8  
B 3.5.1-15  
B 3.5.1-16  
B 3.5.1-17  
B 3.5.1-18  
B 3.6.1.6-3  
B 3.6.1.6-4  
B 3.6.1.6-5



SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 215 TO FACILITY OPERATING LICENSE NO. DPR-29  
AND AMENDMENT NO. 209 TO FACILITY OPERATING LICENSE NO. DPR-30  
EXELON GENERATION COMPANY, LLC  
AND  
MIDAMERICAN ENERGY COMPANY  
QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2  
DOCKET NOS. 50-254 AND 50-265

1.0 INTRODUCTION

By application dated April 25, 2003, Exelon Generation Company, LLC (the licensee) requested changes to the Technical Specifications (TSs) for the Quad Cities Nuclear Power Station, Units 1 and 2 (QCNPS). The proposed changes would revise TS surveillance requirements (SRs) to provide an alternative means of testing the Unit 2 main steam power operated relief valves (PORVs), including those that provide the automatic depressurization system and 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. Industry experience has shown that manual actuation of main steam relief valves during plant operation can lead to increased seat leakage. Increased pilot valve leakage increases the potential of an inadvertent opening of a PORV. In order to minimize the possibility of seat leakage and subsequent potential inadvertent opening of a PORV, the licensee proposes to demonstrate valve functionality by means other than *in situ* testing. The licensee requested that the proposed changes be treated as exigent amendments in accordance with 10 CFR 50.91(a)(6). Specifically the proposed changes would revise:

1.1 SR 3.4.3.2

SR 3.4.3.2 requires the licensee to "Verify each relief valve opens when manually actuated." The licensee proposes to change SR 3.4.3.2 to read,

For Unit 1, verify each relief valve opens when manually actuated.

For Unit 2, verify relief valve 2-0203-3A opens when manually actuated. For relief valves 2-0203-3B, C, D, and E, verify each valve is capable of being opened.

## 1.2 SR 3.5.1.10

SR 3.5.1.10 requires the licensee to "Verify each ADS [automatic depressurization system] valve opens when manually actuated." The licensee proposes to change SR 3.5.1.10 to read,

For Unit 1, verify each ADS valve opens when manually actuated.

For Unit 2, verify ADS valve 2-0203-3A opens when manually actuated. For ADS valves 2-0203-3B, C, D, and E, verify each valve is capable of being opened.

## 1.3 SR 3.6.1.6.1

SR 3.6.1.6.1 requires the licensee to "Verify each low set relief valve opens when manually actuated." The licensee proposes to change SR 3.6.1.6.1 to read,

For Unit 1, verify each low set relief valve opens when manually actuated.

For Unit 2, verify each low set relief valve is capable of being opened.

## 1.4 Background

The licensee states that Unit 2 PORVs 2-0203-3B and 2-0203-3E 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 licensee also states that the proposed changes will allow the testing of the replacement PORVs such that full functionality is demonstrated through overlapping tests, without cycling the valves.

The licensee states that experience in the industry and at QCNPS has indicated that manual actuation of main steam relief valves during plant operation leads to valve seat leakage. There are four PORVs on Unit 2 which are manufactured by Target Rock (i.e., PORVs 3B, 3C, 3D, and 3E). The main steam PORVs consist of a main valve disc and seat and a pilot valve. The licensee states that the 3B and 3E PORVs are currently in a degraded condition as indicated by high tailpipe temperatures. Based on previous testing and temperature trends, the licensee has determined 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. The licensee states that 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. The licensee also states, however, that current leakage from the main seats of the 3B and 3E PORVs is of sufficient quantity to prevent detection of potential pilot valve leakage.

Because of the inability to monitor pilot valve leakage due to the elevated tailpipe temperatures, the licensee is replacing the 3B and 3E PORVs. The proposed TS changes would allow the testing of the PORVs such that full functionality is demonstrated through overlapping tests, without cycling the valve.

## 2.0 REGULATORY EVALUATION

The regulation at 10 CFR 50.36(c)(2)(ii), Criterion 3, requires a limiting condition for operation be established for a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The staff finds that the licensee in sections 4.0 and 6.0 of Attachment 1 of its submittal identified the applicable regulatory requirements.

The QCNPS Unit 2 PORVs 3B, 3C, 3D, and 3E are part of the Automatic Depressurization System (ADS). ADS is a part of the Emergency Core Cooling System (ECCS). The ECCS is designed to provide adequate core cooling across the entire spectrum of line break accidents. The ADS is designed to depressurize the reactor to permit either the Low Pressure Coolant Injection (LPCI) or Core Spray (CS) systems to cool the reactor core during a small break loss of coolant accident (LOCA). This size break would result in a loss of coolant without a significant pressure reduction, so neither system alone could provide adequate core cooling. The performance of the ADS and the CS system are discussed in Updated Final Safety Analysis Report (UFSAR) Sections 6.3.2.4 and 6.3.2.1, respectively. Since the ADS does not provide coolant makeup to the reactor, the ADS is considered only in conjunction with the LPCI or CS systems as a backup to the High Pressure Coolant Injection (HPCI) system.

The PORVs also provide overpressure protection to the RPV as discussed in UFSAR Section 5.2.2. The PORVs actuate in the relief mode to control reactor coolant system pressure during transient conditions to prevent the need for safety valve actuation following such transients. The PORVs can also be manually actuated as needed to control reactor pressure during transients other than those specified for the ADS function. In addition, two PORVs function in the low set relief mode to avoid induced thrust loads on the relief valve discharge line for any subsequent actuations of the relief valve.

The regulatory requirements for which the staff based its acceptance are 10 CFR 50.36(c)(2)(ii). The NRC has previously approved similar TS changes at several boiling water reactor (BWR) facilities (e.g., the LaSalle, Clinton, and Hatch nuclear power facilities) regarding alternatives to on-line stroke testing of main steam safety and relief valves (SRVs) with system steam pressure.

## 3.0 TECHNICAL EVALUATION

The staff has reviewed the licensee's regulatory and technical analyses in support of its proposed license amendment which are described in Attachment 1 of the licensee's submittal. The detailed evaluation below will support the conclusion that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

### 3.1 Licensee's Basis for TS Change

The QCNPS Unit 2 PORVs are Target Rock Model 93V valves, which are solenoid-operated with a dual-stage pilot. They are similar to other multi-stage pilot-actuated SRVs in that lifting of

the first stage pilot relieves loading from the second stage pilot, allowing it to change position, relieving pressure on the main disc. With this pressure relieved, the solenoid is able to lift the main disc with the assistance of inlet pressure. This causes the main disc to move rapidly to its full open position.

The licensee states that the proposed testing of the PORVs uses overlapping tests to verify the valve functions properly at operating conditions and is capable of being opened when installed in the plant. The proposed alternative PORV testing methodology would test the active components instead of cycling of the PORV using reactor steam pressure and flow. Specifically, the licensee states that each valve will be sent to a steam test facility where it will be installed on a steam header in the same orientation as the plant installation. The test conditions in the test facility will be similar to those in the plant installation, including ambient temperature, valve insulation, and steam conditions. The valve will be then leak tested, functionally tested to ensure the valve is capable of opening and closing, and leak tested a final time. Valve stroke time will be measured and verified to be within design limits. Valve seat tightness will be verified by a cold bar test, and if not free of fog, leakage will be measured and verified to be below design limits. Limit switch actuation may be tested prior to or during functional testing.

The licensee further states that the tested valves will then be shipped to the plant without any disassembly or alteration of the valve components. A receipt inspection will be performed in accordance with the requirements of the licensee's Quality Assurance Program upon arrival of the valves at Quad Cities. The licensee's storage requirements ensure the PORVs are protected from exposure to the environment, airborne contamination, acceleration forces, and physical damage. Prior to installation, the licensee will perform electrical continuity checks of the limit switches, and the valves will again be inspected for foreign material and damage. The valves will then be installed, insulated, and electrically connected. Proper electrical connections will be verified per procedure. Electrical power to the control panel and signals causing application of power to the PORV solenoid will be verified to be present at the control panel per procedure. Electrical continuity and resistance checks from the control panel to the relief valve will be performed. The licensee states that these verifications will provide a complete check of the capability of the valve to open and close. The licensee states that the proposed TS changes will allow the testing of the PORVs such that full functionality is demonstrated through overlapping tests, without cycling the valve.

As additional justification for the proposed TS changes, the licensee states that the Boiling Water Reactor Owners' Group (BWROG) Evaluation of NUREG-0737, "Clarification of TMI Action Plan Requirements," Item II.K.3.16, "Reduction of Challenges and Failures of Relief Valves," recommended that the number of safety relief valve openings be reduced as much as possible and unnecessary challenges should be avoided.

The TS Bases for the affected SRs also state that *in situ* testing verifies the discharge line is not blocked. The licensee considers the probability of blocking an ADS discharge line and preventing ADS depressurization to be extremely remote. The licensee further states that the Foreign Material Exclusion program, as implemented at Quad Cities, provides the necessary requirements and guidance to prevent and control introduction of foreign materials into structures, systems, and components. The licensee states that this program minimizes the potential for debris blocking an ADS discharge line.

### 3.2 Evaluation of Proposed TS Changes

The staff has reviewed the licensee's basis for the proposed TS change and finds that with the proposed testing, the functional capability of the valve is verified. A manual actuation and valve leakage test will be performed at a certified test facility using test conditions similar to those for the installed valves in the plant, including valve orientation, ambient temperature, valve insulation, and steam conditions. This also demonstrates that the solenoid coil is capable of actuating the PORV pilot valve. Following valve installation, the licensee's proposed testing includes verifying proper electrical connection and solenoid coil continuity. Therefore, all of the components necessary to manually actuate the PORVs will continue to be tested to demonstrate the functional capability of the PORVs, without the need to stroke-test the valves on-line with system steam pressure conditions.

In addition, the staff finds that the current testing requirements could result in seat leakage of the PORVs during power operation. Excessive seat leakage could interfere with detection and monitoring of pilot valve leakage and could result in excessive suppression pool temperatures. Also, leakage through the pilot valve could eventually result in the inadvertent opening of a PORV.

The staff also finds that the licensee's Foreign Material Exclusion program provides reasonable assurance that the PORV discharge lines would remain unblocked.

Therefore, the staff finds that the licensee's proposed changes to SRs 3.4.3.2, 3.5.1.10, and 3.6.1.6.1 for PORV stroke testing are acceptable. In addition, the licensee proposed changes to the TS Bases to reflect the changes to the SRs. The staff has no objection to the proposed changes to the TS Bases.

### 3.3 Summary

As described above, the licensee has proposed changes to the TSs which would provide for testing of the Unit 2 PORVs to demonstrate proper functional operation, without the need to stroke-test the valves on-line with system steam pressure conditions. Based on the above evaluation, the staff finds that the licensee has adequately justified the proposed changes to the TSs. Therefore, the proposed TS changes to SRs 3.4.3.2, 3.5.1.10, and 3.6.1.6.1 are acceptable.

## 4.0 EXIGENT CIRCUMSTANCES

The Commission's regulations, as stated in 10 CFR 50.91, provide special exceptions for the issuance of amendments when the usual 30-day public notice cannot be met. One type of special exception is an exigency. An exigency exists when the NRC staff and the licensee need to act quickly and time does not permit the staff to publish a *Federal Register* notice allowing 30 days for prior public comment, and the staff also determines that the amendment involves no significant hazards consideration. In accordance with 10 CFR 50.91(a)(6)(B), the NRC staff published a public notice in the *Quad-City Times* on May 5, 2003, providing reasonable notice to the public in the area surrounding the licensee's facility of the licensee's proposed amendment and of the NRC staff's proposed determination of no significant hazards consideration. No comments were received.

In its April 25, 2003, application, the licensee discussed the need for an exigent review of the proposed license amendment. On April 16, 2003, Unit 2 experienced an inadvertent opening of the 3B PORV. Attempts to re-close the PORV were unsuccessful. The inability to re-close the PORV was attributed to a failure of the pilot assembly caused by steam cutting of the pilot seat.

Following startup from the subsequent forced outage to replace the failed PORV, the 3B and 3E PORVs exhibited high tailpipe temperatures. The high tailpipe 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 tailpipe temperature increased after cycling the valve for post-maintenance testing. These results are consistent with industry experience which indicates 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 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 Technical Specification 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.

A review of the tailpipe temperatures for the 3B PORV that failed on April 16, 2003, 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. Discussions with the valve manufacturer (i.e., Target Rock), 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 potentially degraded enough for the leakage to cause the main disc to open. As a result, the licensee plans to shut down Unit 2 on May 8, 2003, prior to the 30 days expiring, and replace the 3B and 3E PORVs. The licensee's basis for replacing the valves is 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 a desire to minimize this type of event from recurring. The need for this license amendment was identified by the licensee on April 23, 2003, as a result of evaluations performed to address the impact of the 3B and 3E elevated tailpipe temperatures.

To support plant startup following the outage, and to support efforts to minimize the potential for an inadvertent opening of a relief valve, the licensee requested NRC approval of the proposed changes by May 9, 2003. This date precludes use of the normal 30-day notice period. Accordingly, as described above, the basis for an exigent amendment request exists and the current situation could not have been avoided. Unit startup following replacement of the leaking PORVs is scheduled on May 10, 2003, which did not allow sufficient time for the NRC staff to publish a *Federal Register* notice allowing 30 days for prior public comment.

On the basis of the above discussion, the NRC staff has determined that exigent circumstances exist and that the licensee used its best efforts to make a timely application and did not cause the exigent situation.

## 5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

In the regulations in 10 CFR 50.92, the Commission states that it may make a final determination that a license amendment involves no significant hazards consideration determination if operation of the facility in accordance with the amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

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 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 effect 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. The licensee has submitted a relief request, which the NRC is reviewing, proposing an acceptable alternative to *in situ* testing of the valve. 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 direct 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.

Based on the above considerations, the NRC staff concludes that the amendments meet the three criteria of 10 CFR 50.92. Therefore, the NRC staff has made a final determination that the proposed amendments do not involve a significant hazards consideration.

## 6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of the amendments. The State official had no comments.

## 7.0 ENVIRONMENTAL CONSIDERATION

The amendments change an inspection or a surveillance requirement. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a final finding that the amendments involve no significant hazards consideration. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

## 8.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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