

Mr. Oliver D. Kingsley, President
 Nuclear Generation Group
 Commonwealth Edison Company
 Executive Towers West III
 1400 Opus Place, Suite 500
 Downers Grove, IL 60515

January 5, 1998

PDR

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M99703, M99704, M99718 AND M99719)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 164 to Facility Operating License No. DPR-19 and Amendment No. 159 to Facility Operating License No. DPR-25 for Dresden, Units 2 and 3, and Amendment No. 179 to Facility Operating License No. DPR-29 and Amendment No. 177 to Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2, respectively. The amendments are in response to your application dated September 30, 1997.

The amendments would add a new Technical Specification (TS) Section 3/4.12.C and associated bases to allow certain reactor coolant pressure tests to be performed in MODE 4 when the reactor pressure vessel requires testing at temperatures greater than 212 degrees Fahrenheit. This temperature normally corresponds with MODE 3.

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

Sincerely,

ORIGINAL SIGNED BY:

Robert M. Pulsifer, Project Manager
 Project Directorate III-2
 Division of Reactor Projects - III/IV
 Office of Nuclear Reactor Regulation

RECEIVED
 1998 JAN -6 AM 10:19
 PUBLIC DOCUMENT ROOM

Docket Nos. 50-237, 50-249, 50-254, 50-265

Enclosures:

1. Amendment No. 164 to DPR-19
2. Amendment No. 159 to DPR-25
3. Amendment No. 179 to DPR-29
4. Amendment No. 177 to DPR-30
5. Safety Evaluation

DRO

cc w/encls: See next page

DISTRIBUTION: Docket File PUBLIC PDIII-2 r/f(2) EAdensam RCapra CMoore JStang
 GHill (4), T5C3 WBeckner, O13H15 ACRS, T2E26 MRing RIII RPulsifer OGC, O15B18

DOCUMENT NAME: G:\CMNTS\PIQUAD\QC99718.AMD

To receive a copy of this document, indicate in the box: "E" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

OFFICE	PM:PD3-2	LA PD3-2	BC:SRX	(A)BC:MCEB	N	PM:PD3-2	e OGC	D:PD3-2
NAME	RPULSIFER	CMOORE	TCOLLINS	SULLIVAN*		JSTANG	Cmaico	RCAPRA
DATE	12/29/97	12/29/97	12/29/97	12/19/97		12/29/97	12/2/98	12/2/98

OFFICIAL RECORD COPY

9802180099 980105
 PDR ADOCK 05000237
 PDR



Mr. Oliver D. Kingsley, President
 Nuclear Generation Group
 Commonwealth Edison Company
 Executive Towers West III
 1400 Opus Place, Suite 500
 Downers Grove, IL 60515

January 5, 1998

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M99703, M99704, M99718 AND M99719)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 164 to Facility Operating License No. DPR-19 and Amendment No. 159 to Facility Operating License No. DPR-25 for Dresden, Units 2 and 3, and Amendment No. 179 to Facility Operating License No. DPR-29 and Amendment No. 177 to Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2, respectively. The amendments are in response to your application dated September 30, 1997.

The amendments would add a new Technical Specification (TS) Section 3/4.12.C and associated bases to allow certain reactor coolant pressure tests to be performed in MODE 4 when the reactor pressure vessel requires testing at temperatures greater than 212 degrees Fahrenheit. This temperature normally corresponds with MODE 3.

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

Sincerely,

ORIGINAL SIGNED BY:

Robert M. Pulsifer, Project Manager
 Project Directorate III-2
 Division of Reactor Projects - III/IV
 Office of Nuclear Reactor Regulation

Docket Nos. 50-237, 50-249, 50-254, 50-265

Enclosures:

1. Amendment No. 164 to DPR-19
2. Amendment No. 159 to DPR-25
3. Amendment No. 179 to DPR-29
4. Amendment No. 177 to DPR-30
5. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION: Docket File PUBLIC PDIII-2 r/f(4) EAdensam RCapra CMoore JStang
 GHill (4), T5C3 WBeckner, O13H15 ACRS, T2E26 MRing RIII RPulsifer OGC, O15B18

DOCUMENT NAME: G:\CMNTS\PIQUAD\QC99718.AMD

To receive a copy of this document, indicate in the box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

OFFICE	PM:PD3-2	LA:PD3-2	BC:SPXB	(A)BC:MCEB	N	PM:PD3-2	e	OGC	D:PD3-2
NAME	RPULSIFER	CMOORE	TCOLLINS	SULLIVAN*	JSTANG	C. MALCO		RCAPRA	
DATE	12/29/97	12/29/97	12/29/97	12/19/97	12/24/97	12/2/98		12/2/98	

OFFICIAL RECORD COPY



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 5, 1998

Mr. Oliver D. Kingsley, President
Nuclear Generation Group
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M99703, M99704, M99718 AND M99719)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 164 to Facility Operating License No. DPR-19 and Amendment No. 159 to Facility Operating License No. DPR-25 for Dresden, Units 2 and 3, and Amendment No. 179 to Facility Operating License No. DPR-29 and Amendment No. 177 to Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2, respectively. The amendments are in response to your application dated September 30, 1997.

The amendments would add a new Technical Specification (TS) Section 3/4.12.C and associated bases to allow certain reactor coolant pressure tests to be performed in MODE 4 when the reactor pressure vessel requires testing at temperatures greater than 212 degrees Fahrenheit. This temperature normally corresponds with MODE 3.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Robert M. Pulsifer".

Robert M. Pulsifer, Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-237, 50-249, 50-254, 50-265

Enclosures:

1. Amendment No. 164 to DPR-19
2. Amendment No. 159 to DPR-25
3. Amendment No. 179 to DPR-29
4. Amendment No. 177 to DPR-30
5. Safety Evaluation

cc w/encls: See next page

O. Kingsley
Commonwealth Edison Company

cc:

Michael I. Miller, Esquire
Sidley and Austin
One First National Plaza
Chicago, Illinois 60603

Commonwealth Edison Company
Site Vice President - Dresden
6500 N. Dresden Road
Morris, Illinois 60450-9765

Commonwealth Edison Company
Dresden Station Manager
6500 N. Dresden Road
Morris, Illinois 60450-9765

U.S. Nuclear Regulatory Commission
Dresden Resident Inspectors Office
6500 N. Dresden Road
Morris, Illinois 60450-9766

William D. Leach
Manager - Nuclear
MidAmerican Energy Company
907 Walnut Street
P.O. Box 657
Des Moines, Iowa 50303

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

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

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

Dresden Nuclear Power Station
Unit Nos. 2 and 3
Quad Cities Nuclear Power Station
Unit Nos. 1 and 2

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

Chairman
Grundy County Board
Administration Building
1320 Union Street
Morris, Illinois 60450

Commonwealth Edison Company
Site Vice President - Quad Cities
22710 206th Avenue N.
Cordova, Illinois 61242

Commonwealth Edison Company
Quad Cities Station Manager
22710 206th Avenue N.
Cordova, Illinois 61242

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

Document Control Desk-Licensing
Commonwealth Edison Company
1400 Opus Place, Suite 400
Downers Grove, Illinois 60515

Mr. Michael J. Wallace
Nuclear Services Senior Vice President
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, IL 60515

Mr. Gene H. Stanley
PWR's Vice President
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, IL 60515

O. Kingsley

Dresden Nuclear Power Station
Units 2 and 3
Quad Cities Nuclear Power Station
Units 1 and 2

- 2 -

Mr. Edward S. Kraft
BWR's Vice President
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, IL 60515

Mr. Dennis Farrar
Regulatory Services Manager
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

Ms. Irene Johnson, Licensing Director
Nuclear Regulatory Services
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

Commonwealth Edison Company
Reg. Assurance Supervisor - Dresden
6500 N. Dresden Road
Morris, Illinois 60450-9766

Commonwealth Edison Company
Reg. Assurance Supervisor - Quad Cities
22710 206th Avenue N.
Cordova, Illinois 61242



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-237

DRESDEN NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 164
License No. DPR-19

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated September 30, 1997, 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 2.C.(2) of Facility Operating License No. DPR-19 is hereby amended to read as follows:

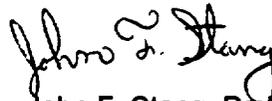
9802180110 980105
PDR ADOCK 05000237
P PDR

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 164, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stang, Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 5, 1998



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-249

DRESDEN NUCLEAR POWER STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 159
License No. DPR-25

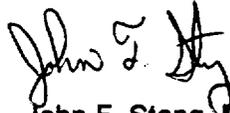
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated September 30, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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-25 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 159 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stang, Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 5, 1998

ATTACHMENT TO LICENSE AMENDMENT NOS. 164 AND 159

FACILITY OPERATING LICENSE NOS. DPR-19 AND DPR-25

DOCKET NOS. 50-237 AND 50-249

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

XIII
XXVI
1-9
--
--
B3/4.12-1
--
--

INSERT

XIII
XXVI
1-9
3/4.12-3
3/4.12-4
B3/4.12-1
B3/4.12-2
B3/4.12-3

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>		<u>PAGE</u>
<u>3/4.11</u>	<u>POWER DISTRIBUTION LIMITS</u>	
3/4.11.A	APLHGR	3/4.11-1
3/4.11.B	TLHGR	3/4.11-2
3/4.11.C	MCPR	3/4.11-3
3/4.11.D	SLHGR	3/4.11-4
<u>3/4.12</u>	<u>SPECIAL TEST EXCEPTIONS</u>	
3/4.12.A	PRIMARY CONTAINMENT INTEGRITY	3/4.12-1
3/4.12.B	SHUTDOWN MARGIN Demonstrations	3/4.12-2
3/4.12.C	Inservice Leak and Hydrostatic Testing Operation	3/4.12-3

BASES

<u>SECTION</u>		<u>PAGE</u>
<u>3/4.11</u>	<u>POWER DISTRIBUTION LIMITS</u>	
3/4.11.A	APLHGR	B 3/4.11-1
3/4.11.B	TLHGR	B 3/4.11-1
3/4.11.C	MCPR	B 3/4.11-2
3/4.11.D	SLHGR	B 3/4.11-3
<u>3/4.12</u>	<u>SPECIAL TEST EXCEPTIONS</u>	
3/4.12.A	PRIMARY CONTAINMENT INTEGRITY	B 3/4.12-1
3/4.12.B	SHUTDOWN MARGIN Demonstrations	B 3/4.12-1
3/4.12.C	Inservice Leak and Hydrostatic Testing Operation	B 3/4.12-1

TABLE 1-2
OPERATIONAL MODES

<u>MODE</u>	<u>MODE SWITCH POSITION^(f)</u>	<u>AVERAGE REACTOR COOLANT TEMPERATURE</u>
1. POWER OPERATION	Run	Any temperature
2. STARTUP	Startup/Hot Standby	Any temperature
3. HOT SHUTDOWN	Shutdown ^(a,e)	> 212°F ^(d)
4. COLD SHUTDOWN	Shutdown ^(a,b,e)	≤ 212°F
5. REFUELING ^(c)	Shutdown or Refuel ^(a,d)	≤ 140°F

TABLE NOTATIONS

- (a) The reactor mode switch may be placed in the Run, Startup/Hot Standby or Refuel position to test the switch interlock functions provided the control rods are verified to remain fully inserted by a second licensed operator or other technically qualified individual.
- (b) The reactor mode switch may be placed in the Refuel position while a single control rod drive is being removed from the reactor pressure vessel per Specification 3.10.I.
- (c) Fuel in the reactor vessel with one or more vessel head closure bolts less than fully tensioned or with the head removed.
- (d) See Special Test Exceptions 3.12.A, 3.12.B and 3.12.C.
- (e) The reactor mode switch may be placed in the Refuel position while a single control rod is being moved provided the one-rod-out interlock is OPERABLE.
- (f) When there is no fuel in the reactor vessel, the reactor is considered not to be in any OPERATIONAL MODE. The reactor mode switch may then be in any position or may be inoperable.

3.12 - LIMITING CONDITIONS FOR OPERATION

C. Inservice Leak and Hydrostatic Testing Operation

The average reactor coolant temperature specified in Table 1-2 for OPERATIONAL MODE 4 may be changed to "NA," and operation considered not to be in OPERATIONAL MODE 3; and the requirements of LCO 3.6.P, "Shutdown Cooling - COLD SHUTDOWN," may be suspended, to allow performance of an inservice leak or hydrostatic test provided the following OPERATIONAL MODE 3 LCOs are met:

1. LCO 3.2.A, "Isolation Actuation", Table 3.2.A-1, Functional Unit Number 2, "SECONDARY CONTAINMENT ISOLATION";
2. LCO 3.7.N, "SECONDARY CONTAINMENT INTEGRITY";
3. LCO 3.7.O, "Secondary Containment Automatic Isolation Dampers"; and
4. LCO 3.7.P, "Standby Gas Treatment System."

APPLICABILITY:

OPERATIONAL MODE 4 with average reactor coolant temperature >212 °F.

ACTION:

With one or more of the above requirements^(a) not met:

4.12 - SURVEILLANCE REQUIREMENTS

C. Inservice Leak and Hydrostatic Testing Operation

Perform the applicable surveillance requirements for the required OPERATIONAL MODE 3 LCOs in accordance with the frequency of the applicable surveillance requirements.

a Separate ACTION entry is allowed for each requirement of the LCO.

3.12 - LIMITING CONDITIONS FOR OPERATION

4.12 - SURVEILLANCE REQUIREMENTS

1. Immediately enter the applicable ACTION of the affected LCO^(b), or
2. Immediately suspend activities that could increase the average reactor coolant temperature or pressure, and reduce average reactor coolant temperature to $\leq 212^{\circ}\text{F}$ within 24 hours.

b Required ACTIONS to be in OPERATIONAL MODE 4 include reduce average coolant temperature $\leq 212^{\circ}\text{F}$.

BASES**3/4.12.A PRIMARY CONTAINMENT INTEGRITY**

The requirement for PRIMARY CONTAINMENT INTEGRITY is not applicable during the period when open vessel tests are being performed during the low power PHYSICS TESTS. Low power PHYSICS TESTS during OPERATIONAL MODE 2 may be required to be performed while still maintaining access to the primary containment and reactor pressure vessel. Additional requirements during these tests to restrict reactor power and reactor coolant temperature provide protection against potential conditions which could require primary containment or reactor coolant pressure boundary integrity.

3/4.12.B SHUTDOWN MARGIN Demonstrations

Performance of SHUTDOWN MARGIN demonstrations with the vessel head removed requires additional restrictions in order to ensure that criticality does not occur. These additional restrictions are specified in this LCO. SHUTDOWN MARGIN tests may be performed while in OPERATIONAL MODE 2 in accordance with Table 1-2 without meeting this Special Test Exception. For SHUTDOWN MARGIN demonstrations performed while in OPERATIONAL MODE 5, additional requirements must be met to ensure that adequate protection against potential reactivity excursions is available. Because multiple control rods will be withdrawn and the reactor will potentially become critical, the approved control rod withdrawal sequence must be enforced by the RWM, or must be verified by a second licensed operator or other technically qualified individual. To provide additional protection against inadvertent criticality, control rod withdrawals that are "out-of-sequence", i.e., do not conform to the Banked Position Withdrawal Sequence, must be made in individual notched withdrawal mode to minimize the potential reactivity insertion associated with each movement. Because the reactor vessel head may be removed during these tests, no other CORE ALTERATION(s) may be in progress. This Special Test Exception then allows changing the Table 1-2 reactor mode switch position requirements to include the Startup or Hot Standby position such that the SHUTDOWN MARGIN demonstrations may be performed while in OPERATIONAL MODE 5.

3/4.12.C Inservice Leak and Hydrostatic Testing Operation

The purpose of this Special Test Exception LCO is to allow certain reactor coolant pressure tests to be performed in OPERATIONAL MODE 4 when the metallurgical characteristics of the reactor pressure vessel (RPV) require pressure testing at temperatures $> 212^{\circ}\text{F}$, which normally corresponds to OPERATIONAL MODE 3.

Pressure Testing required by Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code are performed prior to startup after a refueling outage. The minimum temperatures (at the required pressures) allowed for these tests are determined from the RPV pressure and temperature (P/T) limits required by LCO 3.6.K, "Pressure/Temperature Limits." These limits are conservatively based on the fracture toughness of the reactor vessel, taking into account anticipated vessel neutron fluence. With increased reactor vessel fluence over time, the minimum allowable vessel temperature increases at a given pressure. Pressure testing will eventually be required with minimum reactor coolant temperatures $> 212^{\circ}\text{F}$.

BASES

Allowing the reactor to be considered in OPERATIONAL MODE 4 during pressure testing, when the reactor coolant temperature is $>212^{\circ}\text{F}$, effectively provides an exception to OPERATIONAL MODE 3 requirements, including OPERABILITY of primary containment and the full complement of redundant Emergency Core Cooling Systems. Since the pressure tests are performed at low decay heat values, and near OPERATIONAL MODE 4 conditions, the stored energy in the reactor core will be low. Under these conditions, the potential for failed fuel and a subsequent increase in coolant activity above LCO 3.6.J, "Specific Activity," limits are minimized. In addition, secondary containment will be OPERABLE, in accordance with this Special Test Exception LCO, and will be capable of handling any airborne radioactivity or steam leaks that could occur during the performance of pressure testing. The required pressure testing conditions provide adequate assurance that the consequences of a steam leak will be conservatively bounded by the consequences of the postulated main steam line break outside of primary containment described in the UFSAR. Therefore, these requirements will conservatively limit radiation releases to the environment.

In the event of a large primary system leak, the reactor vessel would rapidly depressurize, allowing the low pressure core cooling systems to operate. The capability of the low pressure coolant injection and core spray subsystems, as required in OPERATIONAL MODE 4 by LCO 3.5.B, "ECCS Shutdown," would be more than adequate to keep the core flooded under this low decay heat load condition. Minor system leaks would be detected by leakage inspections before significant inventory loss occurred.

For the purposes of this Special Test Exception, the protection provided by normally required OPERATIONAL MODE 4 applicable LCOs, in addition to the secondary containment requirements required to be met by this Special Test Exception LCO, will ensure acceptable consequences during normal pressure test conditions and during postulated accident conditions.

Special Test Exception LCOs provide flexibility to perform certain operations by appropriately modifying requirements of other LCOs. A discussion of the criteria satisfied for the other LCOs is provided in their respective Bases. Compliance with this Special Test Exception LCO is optional. Operation at reactor coolant temperatures $>212^{\circ}\text{F}$ can be in accordance with Table 1-2 for OPERATIONAL MODE 3 operation without meeting this Special Test Exception LCO or its ACTIONS.

If it is desired to perform these tests while complying with this Special Test Exception LCO, then the OPERATIONAL MODE 4 applicable LCOs and specified OPERATIONAL MODE 3 LCOs must be met. This Special Test Exception LCO allows changing Table 1-2 temperature limits for OPERATIONAL MODE 4 to "NA" and suspending the requirements of LCO 3.6.P, "Shutdown Cooling - COLD SHUTDOWN." The additional requirements for secondary containment LCOs to be met will provide sufficient protection for operations at reactor coolant temperatures $>212^{\circ}\text{F}$ for the purpose of performing pressure testing.

This LCO allows primary containment to be open for frequent unobstructed access to perform inspections, and for outage activities on various systems to continue consistent with the

BASES

OPERATIONAL MODE 4 applicable requirements that are in effect immediately prior to and immediately after this operation.

The OPERATIONAL MODE 4 requirements may only be modified for the performance of inservice pressure tests so that these operations can be considered as in OPERATIONAL MODE 4, even though the reactor coolant temperature is $>212^{\circ}\text{F}$. The additional requirement for secondary containment OPERABILITY according to the imposed OPERATIONAL MODE 3 requirements provides conservatism in the response of the unit to any event that may occur. Operations in all other OPERATIONAL MODES are unaffected by this LCO.

Footnote (a) has been provided to modify the ACTIONS related to pressure testing operation. Footnote (a) allows a separate condition entry for each requirement of the LCO.

If an LCO specified in LCO 3.12.C is not met, the ACTIONS applicable to the stated requirements are entered immediately. ACTION 1 has been modified by Footnote (b) that clarifies the intent of another LCO's ACTION to be in OPERATIONAL MODE 4 which includes reducing the average reactor coolant temperature to $\leq 212^{\circ}\text{F}$.

ACTION 2 is an alternate action that can be taken instead of ACTION 1 to restore compliance with the normal OPERATIONAL MODE 4 requirements, and thereby exit this Special Test Exception LCO's Applicability. Activities that could further increase reactor coolant temperature or pressure are suspended immediately, in accordance with ACTION 2, and the reactor coolant temperature is reduced to establish normal OPERATIONAL MODE 4 requirements. The allowed completion time of 24 hours for ACTION 2 provides sufficient time to reduce the average reactor coolant temperature from the highest expected value to $\leq 212^{\circ}\text{F}$ with normal cooldown procedures. The completion time is also consistent with the time provided in LCO 3.0.C to reach OPERATIONAL MODE 4 from OPERATIONAL MODE 3.

The applicable LCOs are required to have their Surveillances met to establish that this LCO is being met. A discussion of the applicable Surveillance Requirements is provided in their respective Bases.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 179
License No. DPR-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated September 30, 1997, 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. 179 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert M. Pulsifer, Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 5, 1998



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 177
License No. DPR-30

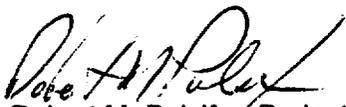
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated September 30, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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. 177 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert M. Pulsifer, Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 5, 1998

ATTACHMENT TO LICENSE AMENDMENT NOS. 179 AND 177

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

DOCKET NOS. 50-254 AND 50-265

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

XIII
XXVI
1-9
--
--
B3/4.12-1
--
--

INSERT

XIII
XXVI
1-9
3/4.12-3
3/4.12-4
B3/4.12-1
B3/4.12-2
B3/4.12-3

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>		<u>PAGE</u>
<u>3/4.11</u>	<u>POWER DISTRIBUTION LIMITS</u>	
3/4.11.A	APLHGR	3/4.11-1
3/4.11.B	TLHGR	3/4.11-2
3/4.11.C	MCPR	3/4.11-4
3/4.11.D	LHGR	3/4.11-5
<u>3/4.12</u>	<u>SPECIAL TEST EXCEPTIONS</u>	
3/4.12.A	PRIMARY CONTAINMENT INTEGRITY	3/4.12-1
3/4.12.B	SHUTDOWN MARGIN Demonstrations	3/4.12-2
3/4.12.C	Inservice Leak and Hydrostatic Testing Operation	3/4.12-3

BASES

<u>SECTION</u>		<u>PAGE</u>
<u>3/4.11</u>	<u>POWER DISTRIBUTION LIMITS</u>	
3/4.11.A	APLHGR	B 3/4.11-1
3/4.11.B	TLHGR	B 3/4.11-2
3/4.11.C	MCPR	B 3/4.11-2
3/4.11.D	LHGR	B 3/4.11-4
<u>3/4.12</u>	<u>SPECIAL TEST EXCEPTIONS</u>	
3/4.12.A	PRIMARY CONTAINMENT INTEGRITY	B 3/4.12-1
3/4.12.B	SHUTDOWN MARGIN Demonstrations	B 3/4.12-1
3/4.12.C	Inservice Leak and Hydrostatic Testing Operation	B 3/4.12-1

TABLE 1-2OPERATIONAL MODES

<u>MODE</u>	<u>MODE SWITCH POSITION^(f)</u>	<u>AVERAGE REACTOR COOLANT TEMPERATURE</u>
1. POWER OPERATION	Run	Any temperature
2. STARTUP	Startup/Hot Standby	Any temperature
3. HOT SHUTDOWN	Shutdown ^(a,e)	> 212°F ^(d)
4. COLD SHUTDOWN	Shutdown ^(a,b,e)	≤ 212°F
5. REFUELING ^(c)	Shutdown or Refuel ^(a,d)	≤ 140°F

TABLE NOTATIONS

- (a) The reactor mode switch may be placed in the Run, Startup/Hot Standby or Refuel position to test the switch interlock functions provided the control rods are verified to remain fully inserted by a second licensed operator or other technically qualified individual.
- (b) The reactor mode switch may be placed in the Refuel position while a single control rod drive is being removed from the reactor pressure vessel per Specification 3.10.I.
- (c) Fuel in the reactor vessel with one or more vessel head closure bolts less than fully tensioned or with the head removed.
- (d) See Special Test Exceptions 3.12.A, 3.12.B and 3.12.C.
- (e) The reactor mode switch may be placed in the Refuel position while a single control rod is being moved provided the one-rod-out interlock is OPERABLE.
- (f) When there is no fuel in the reactor vessel, the reactor is considered not to be in any OPERATIONAL MODE. The reactor mode switch may then be in any position or may be inoperable.

3.12 - LIMITING CONDITIONS FOR OPERATION

C. Inservice Leak and Hydrostatic Testing Operation

The average reactor coolant temperature specified in Table 1-2 for OPERATIONAL MODE 4 may be changed to "NA," and operation considered not to be in OPERATIONAL MODE 3; and the requirements of LCO 3.6.P, "Residual Heat Removal - COLD SHUTDOWN," may be suspended, to allow performance of an inservice leak or hydrostatic test provided the following OPERATIONAL MODE 3 LCOs are met:

1. LCO 3.2.A, "Isolation Actuation," Table 3.2.A-1, Functional Unit Number 2, "SECONDARY CONTAINMENT ISOLATION";
2. LCO 3.7.N, "SECONDARY CONTAINMENT INTEGRITY";
3. LCO 3.7.O, "Secondary Containment Automatic Isolation Dampers"; and
4. LCO 3.7.P, "Standby Gas Treatment System."

APPLICABILITY:

OPERATIONAL MODE 4 with average reactor coolant temperature > 212 °F.

ACTION:

With one or more of the above requirements^(a) not met:

4.12 - SURVEILLANCE REQUIREMENTS

C. Inservice Leak and Hydrostatic Testing Operation

Perform the applicable surveillance requirements for the required OPERATIONAL MODE 3 LCOs in accordance with the frequency of the applicable surveillance requirements.

a Separate ACTION entry is allowed for each requirement of the LCO.

3.12 - LIMITING CONDITIONS FOR OPERATION

4.12 - SURVEILLANCE REQUIREMENTS

1. Immediately enter the applicable ACTION of the affected LCO^(b), or
2. Immediately suspend activities that could increase the average reactor coolant temperature or pressure, and reduce average reactor coolant temperature to $\leq 212^{\circ}\text{F}$ within 24 hours.

b Required ACTIONS to be in OPERATIONAL MODE 4 include reduce average coolant temperature $\leq 212^{\circ}\text{F}$.

BASES

3/4.12.A PRIMARY CONTAINMENT INTEGRITY

The requirement for PRIMARY CONTAINMENT INTEGRITY is not applicable during the period when open vessel tests are being performed during the low power PHYSICS TESTS. Low power PHYSICS TESTS during OPERATIONAL MODE 2 may be required to be performed while still maintaining access to the primary containment and reactor pressure vessel. Additional requirements during these tests to restrict reactor power and reactor coolant temperature provide protection against potential conditions which could require primary containment or reactor coolant pressure boundary integrity.

3/4.12.B SHUTDOWN MARGIN Demonstrations

Performance of SHUTDOWN MARGIN demonstrations with the vessel head removed requires additional restrictions in order to ensure that criticality does not occur. These additional restrictions are specified in this LCO. SHUTDOWN MARGIN tests may be performed while in OPERATIONAL MODE 2 in accordance with Table 1-2 without meeting this Special Test Exception. For SHUTDOWN MARGIN demonstrations performed while in OPERATIONAL MODE 5, additional requirements must be met to ensure that adequate protection against potential reactivity excursions is available. Because multiple control rods will be withdrawn and the reactor will potentially become critical, the approved control rod withdrawal sequence must be enforced by the RWM, or must be verified by a second licensed operator or other technically qualified individual. To provide additional protection against inadvertent criticality, control rod withdrawals that are "out-of-sequence", i.e., do not conform to the Banked Position Withdrawal Sequence, must be made in individual notched withdrawal mode to minimize the potential reactivity insertion associated with each movement. Because the reactor vessel head may be removed during these tests, no other CORE ALTERATION(s) may be in progress. This Special Test Exception then allows changing the Table 1-2 reactor mode switch position requirements to include the Startup or Hot Standby position such that the SHUTDOWN MARGIN demonstrations may be performed while in OPERATIONAL MODE 5.

3/4.12.C Inservice Leak and Hydrostatic Testing Operation

The purpose of this Special Test Exception LCO is to allow certain reactor coolant pressure tests to be performed in OPERATIONAL MODE 4 when the metallurgical characteristics of the reactor pressure vessel (RPV) require pressure testing at temperatures $> 212^{\circ}\text{F}$, which normally corresponds to OPERATIONAL MODE 3.

Pressure Testing required by Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code are performed prior to startup after a refueling outage. The minimum temperatures (at the required pressures) allowed for these tests are determined from the RPV pressure and temperature (P/T) limits required by LCO 3.6.K, "Pressure/Temperature Limits." These limits are conservatively based on the fracture toughness of the reactor vessel, taking into account anticipated vessel neutron fluence. With increased reactor vessel fluence over time, the minimum allowable vessel temperature increases at a given pressure. Pressure testing will eventually be required with minimum reactor coolant temperatures $> 212^{\circ}\text{F}$.

BASES

Allowing the reactor to be considered in OPERATIONAL MODE 4 during pressure testing, when the reactor coolant temperature is $>212^{\circ}\text{F}$, effectively provides an exception to OPERATIONAL MODE 3 requirements, including OPERABILITY of primary containment and the full complement of redundant Emergency Core Cooling Systems. Since the pressure tests are performed at low decay heat values, and near OPERATIONAL MODE 4 conditions, the stored energy in the reactor core will be low. Under these conditions, the potential for failed fuel and a subsequent increase in coolant activity above LCO 3.6.J, "Specific Activity," limits are minimized. In addition, secondary containment will be OPERABLE, in accordance with this Special Test Exception LCO, and will be capable of handling any airborne radioactivity or steam leaks that could occur during the performance of pressure testing. The required pressure testing conditions provide adequate assurance that the consequences of a steam leak will be conservatively bounded by the consequences of the postulated main steam line break outside of primary containment described in the UFSAR. Therefore, these requirements will conservatively limit radiation releases to the environment.

In the event of a large primary system leak, the reactor vessel would rapidly depressurize, allowing the low pressure core cooling systems to operate. The capability of the low pressure coolant injection and core spray subsystems, as required in OPERATIONAL MODE 4 by LCO 3.5.B, "ECCS Shutdown," would be more than adequate to keep the core flooded under this low decay heat load condition. Minor system leaks would be detected by leakage inspections before significant inventory loss occurred.

For the purposes of this Special Test Exception, the protection provided by normally required OPERATIONAL MODE 4 applicable LCOs, in addition to the secondary containment requirements required to be met by this Special Test Exception LCO, will ensure acceptable consequences during normal pressure test conditions and during postulated accident conditions.

Special Test Exception LCOs provide flexibility to perform certain operations by appropriately modifying requirements of other LCOs. A discussion of the criteria satisfied for the other LCOs is provided in their respective Bases. Compliance with this Special Test Exception LCO is optional. Operation at reactor coolant temperatures $>212^{\circ}\text{F}$ can be in accordance with Table 1-2 for OPERATIONAL MODE 3 operation without meeting this Special Test Exception LCO or its ACTIONS.

If it is desired to perform these tests while complying with this Special Test Exception LCO, then the OPERATIONAL MODE 4 applicable LCOs and specified OPERATIONAL MODE 3 LCOs must be met. This Special Test Exception LCO allows changing Table 1-2 temperature limits for OPERATIONAL MODE 4 to "NA" and suspending the requirements of LCO 3.6.P, "Residual Heat Removal - COLD SHUTDOWN." The additional requirements for secondary containment LCOs to be met will provide sufficient protection for operations at reactor coolant temperatures $>212^{\circ}\text{F}$ for the purpose of performing pressure testing.

This LCO allows primary containment to be open for frequent unobstructed access to perform inspections, and for outage activities on various systems to continue consistent with the

BASES

OPERATIONAL MODE 4 applicable requirements that are in effect immediately prior to and immediately after this operation.

The OPERATIONAL MODE 4 requirements may only be modified for the performance of inservice pressure tests so that these operations can be considered as in OPERATIONAL MODE 4, even though the reactor coolant temperature is $>212^{\circ}\text{F}$. The additional requirement for secondary containment OPERABILITY according to the imposed OPERATIONAL MODE 3 requirements provides conservatism in the response of the unit to any event that may occur. Operations in all other OPERATIONAL MODES are unaffected by this LCO.

Footnote (a) has been provided to modify the ACTIONS related to pressure testing operation. Footnote (a) allows a separate condition entry for each requirement of the LCO.

If an LCO specified in LCO 3.12.C is not met, the ACTIONS applicable to the stated requirements are entered immediately. ACTION 1 has been modified by Footnote (b) that clarifies the intent of another LCO's ACTION to be in OPERATIONAL MODE 4 which includes reducing the average reactor coolant temperature to $\leq 212^{\circ}\text{F}$.

ACTION 2 is an alternate action that can be taken instead of ACTION 1 to restore compliance with the normal OPERATIONAL MODE 4 requirements, and thereby exit this Special Test Exception LCO's Applicability. Activities that could further increase reactor coolant temperature or pressure are suspended immediately, in accordance with ACTION 2, and the reactor coolant temperature is reduced to establish normal OPERATIONAL MODE 4 requirements. The allowed completion time of 24 hours for ACTION 2 provides sufficient time to reduce the average reactor coolant temperature from the highest expected value to $\leq 212^{\circ}\text{F}$ with normal cooldown procedures. The completion time is also consistent with the time provided in LCO 3.0.C to reach OPERATIONAL MODE 4 from OPERATIONAL MODE 3.

The applicable LCOs are required to have their Surveillances met to establish that this LCO is being met. A discussion of the applicable Surveillance Requirements is provided in their respective Bases.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 164 TO FACILITY OPERATING LICENSE NO. DPR-19,
AMENDMENT NO. 159 TO FACILITY OPERATING LICENSE NO. DPR-25,
AMENDMENT NO. 179 TO FACILITY OPERATING LICENSE NO. DPR-29
AND AMENDMENT NO. 177 TO FACILITY OPERATING LICENSE NO. DPR-30

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-237, 50-249, 50-254 AND 50-265

1.0 INTRODUCTION

By letter dated September 30, 1997, the Commonwealth Edison Company (ComEd, the licensee) submitted a request for changes to the Technical Specification (TS) for the Dresden and Quad Cities Nuclear Power Stations. The proposed changes would add a new special test exception TS 3/4.12.C, "Inservice Leak and Hydrostatic Testing Operation." The proposed changes would also include corresponding changes to the TS Index, Table 1.2, "OPERATIONAL MODES," and provide Bases for TS 3/4.12.C. The proposed changes would permit Dresden and Quad Cities to remain in OPERATIONAL MODE 4 when the average reactor coolant temperature is > 212 degrees Fahrenheit, and OPERATIONAL MODE 3 Limiting Conditions for Operation (LCO) for secondary containment isolation, secondary containment integrity and filtration, secondary containment automatic isolation dampers, and Standby Gas Treatment (SBGT) operability are being met. The amendment request was proposed based upon Section 3.10.1 of the Improved Standard Technical Specifications (NUREG-1433).

2.0 EVALUATION

The Dresden and Quad Cities TS define five OPERATIONAL MODES. OPERATIONAL MODE 4 requires the reactor mode switch to be in the shutdown position and the average reactor coolant temperature to be less than or equal to 212 degrees Fahrenheit. OPERATIONAL MODE 3 also requires the reactor mode switch to be in the shutdown position, but with the average reactor coolant temperature greater than 212 degrees Fahrenheit.

The Dresden and Quad Cities TS require that various TS be applicable in one or more of the five OPERATIONAL MODES. Additional TS become applicable when the plant enters OPERATIONAL MODE 3 from OPERATIONAL MODE 4. This change in OPERATIONAL MODE occurs when the average reactor coolant temperature is increased above 212 degrees Fahrenheit. TS of particular concern for entry into OPERATIONAL MODE 3 are TS 3.2.A, "Isolation Actuation," Table 3.2.A-1, Item 2, "SECONDARY CONTAINMENT INSULATION," TS 3.7.N, "SECONDARY CONTAINMENT INTEGRITY," TS 3.7.O, "Secondary Containment Automatic Isolation Dampers," and TS 3.7.P, "Standby Gas Treatment System." TS 3.5.A, "Emergency Core Cooling System - Operating," requires two core spray (CS) system subsystems, the low pressure coolant injection (LPCI) subsystem, the high pressure coolant injection (HPCI) system, and the automatic depressurization system to be OPERABLE in OPERATIONAL MODE 3. TS 3.5.B, "Emergency Core Cooling System - Shutdown," requires at least two of the following four subsystem/loops be OPERABLE: One or both CS subsystems and one or both LPCI subsystem loops be OPERABLE in OPERATIONAL MODES 4 and 5, thereby permitting outage-related maintenance to be performed on the emergency core cooling system (ECCS) not required to be OPERABLE.

TS 3.7.A requires PRIMARY CONTAINMENT INTEGRITY to be maintained in OPERATIONAL MODE 3, but PRIMARY CONTAINMENT INTEGRITY is not required in OPERATIONAL MODE 4. The requirements of TS 3.7.A significantly restrict unobstructed access within the primary containment during operations in OPERATIONAL MODE 3. The licensee desires to be able to perform certain outage activities on various systems while remaining consistent with OPERATIONAL MODE 4 applicable requirements that are in effect immediately prior to and immediately following inservice leak and hydrostatic testing.

The reactor coolant system (RCS) is isolated during leak or hydrostatic tests. This isolation makes RCS temperature control difficult since the RCS is isolated from its heat sinks, and heat input to the RCS is caused by both decay heat and mechanical heat from the recirculation pumps. TS 3.6.K, "Pressure/Temperature Limits," currently requires reactor pressure vessel temperatures approaching 212 degrees Fahrenheit when the RCS is pressurized for leak or hydrostatic testing. This minimum temperature for performing leak or hydrostatic tests will increase over time as fast neutron fluence to the reactor vessel increases with operating time. The leak or hydrostatic tests require several hours for completion. Operating experience has shown that the RCS temperature slowly increases during these tests and, dependent upon the amount of decay heat present, the RCS may exceed the 212 degrees Fahrenheit limit of OPERATIONAL MODE 4. Therefore, the licensee has proposed to increase the OPERATIONAL MODE 4 temperature limit to provide some additional margin within which to complete the leak or hydrostatic tests, with appropriate limiting conditions.

Permitting the average reactor coolant temperature to be increased above 212 degrees Fahrenheit while performing leak or hydrostatic tests will not substantially affect the results of potential accidents which might occur with the slight increased average reactor coolant temperature since the leak and hydrostatic tests are performed with the RCS near water solid, at low decay heat values, near OPERATIONAL MODE 4 conditions, and with all control rods fully inserted. Therefore, the stored energy in the reactor core would be very low and the potential for causing fuel failures with a subsequent increase in coolant activity is minimal. The restrictions provided in the proposed new TS, Section 3/4.12.C, would require secondary containment integrity as well as OPERABLE automatic isolation dampers, OPERABLE Standby Gas

Treatment System, and OPERABLE isolation actuation instrumentation for this equipment. Therefore, any leakage of radioactive materials from the RCS would be filtered prior to release to the atmosphere.

In the event of a large loss-of-coolant accident during a leak or hydrostatic test, the RCS would rapidly depressurize, thereby permitting the low pressure ECCS equipment required by TS 3.5.2 to actuate and thereby keep the core flooded. This action would prevent the fuel from overheating and releasing radioactive materials. The RCS inspections required to be performed as part of the leak or hydrostatic tests would be expected to detect small leaks before a significant inventory of coolant was lost.

Based on the foregoing analyses and that these changes meet the intent of NUREG-1433, the staff concludes that the proposed TS changes will ensure acceptable consequences of any postulated accidents, are enveloped by the previously accepted analyses, and are, therefore, acceptable.

3.0 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.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. 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 previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (62 FR 61839). 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.

5.0 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.

Principal Contributor: Robert M. Pulsifer

Date: January 5, 1998