

January 28, 2000

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: QUAD CITIES - ISSUANCE OF AMENDMENTS (TAC NOS. MA6873 AND MA6874)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 193 to Facility Operating License No. DPR-29 and Amendment No. 189 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 October 12, 1999.

The amendments revise Technical Specification (TS) 2.2, "Limiting Safety System Settings," and TS 3/4.1.A, "Reactor Protection System," to remove an anticipatory reactor trip signal, the turbine electro-hydraulic control (EHC) low oil pressure trip, from the reactor protection system (RPS) trip function requirements.

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/

Stewart N. Bailey, 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. 193 to DPR-29
 2. Amendment No. 189 to DPR-30
 3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

File Center
GHill (4), T5C3
I. Ahmed

PUBLIC
WBeckner, O7H3

PD3 r/f
ACRS, T2E26

OGC, O15B18
MRing, RIII

DOCUMENT NAME: G:\PDIII-2\quad\AMDA6873.wpd

*Concurred by memo; no major revisions

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

OFFICE	PM:LPD3	<input checked="" type="checkbox"/>	LA:LPD3	<input checked="" type="checkbox"/>	SC:EEIB	<input type="checkbox"/>	OGC	<input type="checkbox"/>	SC:LPD3	<input type="checkbox"/>
NAME	SBAILEY <i>SMB</i>		CMOORE		EMARINOS		<i>Cmauco</i>		AMENDIOLA	<i>AM</i>
DATE	01/28/00		01/27/00		12/13/99*		01/24/00		01/28/00	

OFFICIAL RECORD COPY

DF01

O. Kingsley
Commonwealth Edison Company

Quad Cities Nuclear Power Station
Units 1 and 2

cc:

Commonwealth Edison Company
Quad Cities Station Manager
22710 206th Avenue North
Cordova, Illinois 61242-9740

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

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

Mr. David Helwig
Senior Vice President
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, Illinois 60515

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

Mr. Gene H. Stanley
Vice President - Nuclear Operations
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, Illinois 60515

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

Mr. Christopher Crane
Senior VP - Nuclear Operations
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, Illinois 60515

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

Commonwealth Edison Company
Site Vice President - Quad Cities
22710 206th Avenue North
Cordova, Illinois 61242-9740

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

Commonwealth Edison Company
Reg. Affairs Manager - Quad Cities
22710 206th Avenue N.
Cordova, Illinois 61242-9740

Mr. R. M. Krich
Vice President - Regulatory Services
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, Illinois 60515

Ms. Pamela B. Stroebel
Senior Vice President and General Counsel
Commonwealth Edison Company
P.O. Box 767
Chicago, Illinois 60690-0767

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



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. 193
License No. DPR-29

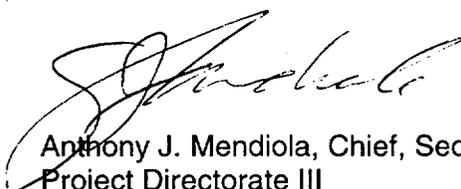
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated October 12, 1999, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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. 193 , 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 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



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: January 28, 2000



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. 189
License No. DPR-30

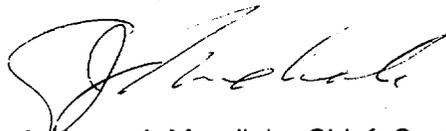
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated October 12, 1999, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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. 189 , 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 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



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: January 28, 2000

ATTACHMENT TO LICENSE AMENDMENT NOS. 193 AND 189

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

2-5
B 2-9
B 2-10
3/4.1-3
3/4.1-8
B 3/4.1-2

INSERT

2-5
B 2-9
B 2-10
3/4.1-3
3/4.1-8
B 3/4.1-2

TABLE 2.2.A-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION SETPOINTS

<u>Functional Unit</u>	<u>Trip Setpoint</u>
7. Drywell Pressure - High	≤ 2.5 psig
8. Scram Discharge Volume Water Level - High:	≤ 40 gallons
9. Turbine Stop Valve - Closure	$\leq 10\%$ closed
10. Deleted	
11. Turbine Control Valve Fast Closure	≥ 460 psig EHC fluid pressure
12. Turbine Condenser Vacuum - Low	≥ 21 inches Hg vacuum
13. Reactor Mode Switch Shutdown Position	NA
14. Manual Scram	NA

BASES

7. Drywell Pressure - High

High pressure in the drywell could indicate a break in the primary pressure boundary systems or a loss of drywell cooling. Therefore, pressure sensing instrumentation is provided as a backup to the water level instrumentation. The reactor is scrammed on high pressure in order to minimize the possibility of fuel damage and reduce the amount of energy being added to the coolant and the primary containment. The scram setting was selected as low as possible without causing spurious scrams.

8. Scram Discharge Volume Water Level - High

The control rod drive scram system is designed so that all of the water which is discharged from the reactor by a scram can be accommodated in the discharge piping. A part of this system is an individual instrument volume for each of the scram discharge volumes. These two instrument volumes and their piping can hold in excess of 90 gallons of water and are the low point in the piping. No credit was taken for the instrument volumes in the design of the discharge piping relative to the amount of water which must be accommodated during a scram. During normal operations, the scram discharge volumes are empty; however, should either scram discharge volume accumulate water, the water discharged to the piping from the reactor during a scram may not be accommodated which could result in slow scram times or partial or no control rod insertion. To preclude this occurrence, level switches have been installed in both instrument volumes which will alarm and scram the reactor while sufficient volume remains to accommodate the discharged water. Diverse level sensing methods have been incorporated into the design and logic of the system to prevent common mode failure. The setting for this anticipatory scram signal has been chosen on the basis of providing sufficient volume remaining to accommodate a scram, even with 5 gpm leakage per drive into the scram discharge volume. As indicated above, there is sufficient volume in the piping to accommodate the scram without impairment of the scram times or the amount of insertion of the control rods.

9. Turbine Stop Valve - Closure

The turbine stop valve closure scram setting anticipates the pressure, neutron flux, and heat flux increase that could result from rapid closure of the turbine stop valves. With a scram setting of 10% of valve closure from full open, the resultant increase in surface heat flux is limited such that MCPR remains above the fuel cladding integrity Safety Limit, even during the worst-case transient that assumes the turbine bypass fails to operate.

10. Deleted

BASES

11. Turbine Control Valve Fast Closure

The turbine control valve fast closure scram is provided to anticipate the rapid increase in pressure and neutron flux resulting from fast closure of the turbine control valves due to a load rejection and subsequent failure of the bypass valves; i.e., MCPR remains above the fuel cladding integrity Safety Limit for this transient. For the load rejection without bypass transient from 100% power, the peak heat flux (and therefore LHGR) increases on the order of 15% which provides a wide margin to the value corresponding to 1% plastic strain of the cladding.

The scram setting based on EHC fluid pressure was developed to ensure that the pressure switch is actuated prior to the closure of the turbine control valves (at approximately 400 psig EHC fluid pressure), yet assure that the system is not actuated unnecessarily due to EHC system pressure transients which may cause EHC system pressure to momentarily decrease.

12. Turbine Condenser Vacuum - Low

Loss of condenser vacuum occurs when the condenser can no longer handle the heat input. Loss of condenser vacuum initiates a closure of the turbine stop valves and turbine bypass valves which eliminates the heat input to the condenser. Closure of the turbine stop and bypass valves causes a pressure transient, neutron flux rise and an increase in surface heat flux. To prevent the fuel cladding integrity Safety Limit from being exceeded if this occurs, a reactor scram occurs on turbine stop valve closure. The turbine stop valve closure scram function alone is adequate to prevent the fuel cladding integrity Safety Limit from being exceeded, in the event of a turbine trip transient with bypass closure. The condenser low vacuum scram is anticipatory to the stop valve closure scram and causes a scram before the stop valves (and bypass valves) are closed and thus, the resulting transient is less severe.

TABLE 3.1.A-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION

<u>Functional Unit</u>	<u>Applicable OPERATIONAL MODE(s)</u>	<u>Minimum OPERABLE CHANNEL(s) per TRIP SYSTEM^(a)</u>	<u>ACTION</u>
5. Main Steam Line Isolation Valve - Closure	1	4	14
6. Main Steam Line Radiation - High	1, 2 ^(f)	2	15
7. Drywell Pressure - High	1, 2 ^(h)	2	11
8. Scram Discharge Volume Water Level - High			
a. ΔP Switch, and	1, 2 5 ^(b,i)	2 2	11 13
b. Thermal Switch	1, 2 5 ^(b,i)	2 2	11 13
9. Turbine Stop Valve - Closure	1 ^(d)	4	16
10. Deleted			
11. Turbine Control Valve Fast Closure	1 ^(d)	2	16
12. Turbine Condenser Vacuum - Low	1	2	14

QUAD CITIES - UNITS 1 & 2

3/4.1-3

Amendment Nos. 193 & 189

TABLE 4.1.A-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>Functional Unit</u>	<u>Applicable OPERATIONAL MODES</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL^(a) CALIBRATION</u>
8. Scram Discharge Volume Water Level - High				
a. ΔP Switch, and	1, 2, 5 ^(j,k)	NA	Q	E
b. Thermal Switch	1, 2, 5 ^(j,k)	NA	Q	NA
9. Turbine Stop Valve - Closure	1 ^(l)	NA	M	E
10. Deleted				
11. Turbine Control Valve Fast Closure	1 ^(l)	NA	M	E
12. Turbine Condenser Vacuum - Low	1	NA	M	Q
13. Reactor Mode Switch Shutdown Position	1, 2, 3, 4, 5	NA	E	NA
14. Manual Scram	1, 2, 3, 4, 5	NA	M	NA

BASES

The IRM system provides protection against excessive power levels and short reactor periods in the startup and intermediate power ranges (reference SAR Sections 7.4.4.2 and 7.4.4.3).

In the power range, the APRM system provides required protection (reference SAR Section 7.4.5.2). Thus, the IRM system is not required (and is automatically bypassed) in OPERATIONAL MODE 1, the APRMs cover only the intermediate and power range; and the IRMs provide adequate coverage in the startup and intermediate range. The IRM inoperative function ensures that the instrument CHANNEL fails in the tripped condition upon loss of detector voltage.

Three APRM instrument CHANNEL(s) are provided for each TRIP SYSTEM. APRM CHANNEL(s) #1 and #3 operate contacts in one logic path and APRM CHANNEL(s) #2 and #3 operate contacts in the other logic path of the TRIP SYSTEM. APRM CHANNEL(s) #4, #5 and #6 are arranged similarly in the other TRIP SYSTEM's dual logic paths. Each TRIP SYSTEM has one more APRM than is necessary to meet the minimum number required per CHANNEL. This allows the bypassing of one APRM per TRIP SYSTEM for maintenance, testing, or calibration. Additional IRM CHANNEL(s) have also been provided to allow for bypassing of one such CHANNEL.

A reactor mode switch is provided which actuates or bypasses the various scram functions appropriate to the particular plant operating status (reference SAR Section 7.7.1.2). A bypass in the Refuel or Startup/Hot Standby operational modes is provided for the turbine condenser low vacuum scram and main steam line isolation valve closure scrams for flexibility during startup and to allow repairs to be made to the turbine condenser. While this bypass is in effect, protection is provided against pressure or flux increases by the high-pressure scram and APRM 15% scram, respectively, which are effective in Startup/Hot Standby.

The manual scram function is available in OPERATIONAL MODE(s) 1 through 5, thus providing for a manual means of rapidly inserting control rods whenever fuel is in the reactor.

The turbine stop valve closure scram and the turbine control valve fast closure scram occur by design on turbine first stage pressure which is normally equivalent to ~45% RATED THERMAL POWER. However, since this is dependent on bypass valve position, the conservative reactor power is used to determine applicability.

Surveillance requirements for the reactor protection system are selected in order to demonstrate proper function and operability. The surveillance intervals are determined in many different ways, such as, 1) operating experience, 2) good engineering judgement, 3) reliability analyses, or 4) other analyses that are found acceptable to the NRC. The performance of the specified surveillances at the specified frequencies provides assurance that the protective functions associated with each CHANNEL can be completed as assumed in the safety analyses. A surveillance interval of "prior to startup" assures that these functions are available to perform their safety functions during control



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 193 TO FACILITY OPERATING LICENSE NO. DPR-29

AND AMENDMENT NO. 189 TO FACILITY OPERATING LICENSE NO. DPR-30

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-254 AND 50-265

1.0 INTRODUCTION

By letter dated October 12, 1999, Commonwealth Edison Company (ComEd, the licensee), proposed license amendments to change the Technical Specifications (TSs) for Quad Cities Nuclear Power Station, Units 1 and 2 (Quad Cities). The proposed changes would delete the turbine electro-hydraulic control (EHC) low oil pressure reactor trip function from the reactor protection system (RPS) instrumentation requirements. The associated TS changes would remove Functional Unit 10, "Turbine EHC Control Oil Pressure - Low," from TS Table 2.2.A-1, "Reactor Protection System Instrumentation Setpoints;" TS Table 3.1.A-1, "Reactor Protection System Instrumentation," TS Table 4.1.A-1, "Reactor Protection System Instrumentation Surveillance Requirements," and associated Bases changes. The licensee's submittal provided detailed description, background, and safety analysis to justify the proposed changes to the plant TS. The following is the staff evaluation of the licensee's justification for the proposed TS changes.

2.0 EVALUATION

The EHC system operates using high pressure oil to provide the main turbine control and trip functions. A loss of oil pressure in the EHC results in a rapid operation (fast closure) of the turbine control valves. The fast closure of the turbine control valves creates pressure transient in the reactor causing a rapid increase in reactor power. To limit the consequential increase of the reactor power, the fast closure of the main turbine control valves is designed to initiate a reactor trip. However, the loss of EHC control oil pressure event was not protected by the turbine control valve fast closure trip. To mitigate the consequences of this event, in the 1970s the licensee added the EHC control oil low pressure reactor trip instrumentation, with the staff approved TS requirements, to provide an anticipatory reactor trip. This trip function anticipates the pressure transient due to the fast closure of the turbine control valves and initiates an anticipatory reactor trip before any significant increase in neutron flux causes a reactor power increase.

In the original design of Quad Cities, the control valve fast closure trip function used limit switches that detected the actuation of the fast acting solenoid valve and provided a direct reactor trip on the turbine control valves fast closure. These limit switches were simple on-off status indicators of the fast acting solenoid valves. There were no trip setpoint calculations associated with the limit switches and the plant TS did not include periodic calibration requirements for these limit switches. In the early 1990s, the licensee upgraded the fast acting solenoid valves. The new fast acting solenoid valves use EHC oil low pressure instrumentation signal, instead of the solenoid valve position switches, to initiate a reactor trip on turbine control valve fast closure. This change of trip signal was recommended by General Electric (GE) for upgrading the existing fast acting solenoid valves. This modification and the associated TS changes (addition of EHC oil pressure instrumentation trip setpoint, setpoint allowable value, and the instrument calibration frequency) were approved by the staff in safety evaluations (SEs) dated February 21, 1991, for Unit 1 and July 23, 1991, for Unit 2.

With the upgraded fast acting solenoid valve, the Quad Cities TSs provide redundant instrumentation for EHC control oil pressure to provide a reactor trip for fast closure of the turbine control valves: one being the EHC control oil pressure switch associated with the upgraded fast acting solenoid valve, the other being the loss of EHC control oil instrumentation providing an anticipatory reactor trip by "turbine EHC control oil pressure-low" signal on rapid closure of the turbine control valves. The licensee stated that there are no Updated Final Safety Analysis Report (UFSAR) design-basis events that take credit for the "turbine EHC control oil pressure-low" reactor trip. The trip initiated by the EHC control oil pressure switch associated with the fast acting solenoid valve mitigates the consequences of loss of EHC control oil event and all events involving fast closure of the turbine control valve, including the load rejection event concurrent with the steam bypass valve failure. Additionally, the GE Standard TS (STS) do not include turbine EHC control oil low pressure instrumentation for a reactor trip on a loss of EHC control oil pressure.

Section 182a of the Atomic Energy Act (the Act) requires applicants for nuclear power plant operating licenses to include TSs as part of the license. In Section 50.36 of Title 10 of the Code of Federal Regulations (10 CFR 50.36), the Commission established the regulatory requirements related to the content of TSs. That regulation requires that the TSs include items in five specific categories, including (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls.

The four criteria defined by 10 CFR 50.36 for determining whether a particular matter is required to be included in the technical specification limiting conditions for operation are as follows:

1. installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary;
2. a process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission-product barrier;

3. 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;
4. a structure, system or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

ComEd proposed to remove Function 10, "Turbine EHC Control Oil Pressure - Low," from TS Table 3.1.A-1, "Reactor Protection System Instrumentation," and Table 4.1.A-1, "Reactor Protection System Instrumentation Surveillance Requirements." As described above, this instrumentation was installed in the 1970s to mitigate the consequences of a loss of EHC control oil pressure event by providing an anticipatory reactor trip. In the 1990s, ComEd upgraded the fast acting solenoid valve to one that acts on low turbine oil pressure, so that the control oil pressure switch associated with these valves provides essentially the same function as the turbine EHC control oil low pressure trip.

The turbine EHC control oil low pressure trip is not used for and is not capable of detecting a significant abnormal degradation of the reactor coolant pressure boundary before a design basis accident. The trip is not a process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission-product barrier. The trip does not function as a primary success path to mitigate events which assume a failure of or a challenge to the integrity of fission produce barriers, since the trip's function is redundant to that of the trip signal from the fast acting solenoid valve. Finally, this trip is not a structure, system or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

Therefore, the staff finds that the EHC control oil low pressure trip does not meet the criteria of 10 CFR 50.36 for inclusion in TSs. The staff has determined that the turbine EHC control oil low pressure reactor trip function is redundant to the EHC control oil pressure switch associated with the fast acting solenoid valve, which is required to be in the TS. Therefore, the proposed TS changes are 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 (64 FR 67331). 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: I. Ahmed
S. Bailey

Date: January 28, 2000