



Docket File
50-237

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

February 16, 1995

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

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M84321, M84322, M84319 AND M84320)

Dear Mr. Farrar:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 131 to Facility Operating License No. DPR-19 and Amendment No. 125 to Facility Operating License No. DPR-25 for the Dresden Nuclear Power Station, Units 2 and 3, respectively; and Amendment No. 152 to Facility Operating License No. DPR-29 and Amendment No. 148 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 July 29, 1992, as supplemented January 14, 1993, and February 16, 1993.

As a result of findings by a Diagnostic Evaluation Team inspection performed by the NRC staff at the Dresden Nuclear Power Station in 1987, Commonwealth Edison Company (ComEd) made a decision that both the Dresden Nuclear Power Station and sister site Quad Cities Nuclear Power Station, need attention focused on the existing custom Technical Specifications (TS) being used at both sites.

ComEd made the decision to initiate a Technical Specification Upgrade Program (TSUP) for both Dresden and Quad Cities. ComEd evaluated both the Dresden and Quad Cities TSs against the Standard Technical Specifications (STS) contained in NUREG-0123, Revision 4, "Standard Technical Specification General Electric Plants, BWR/4." ComEd's evaluation identified numerous potential improvements such as clarifying requirements, changing the TS to make them more understandable to eliminate interpretation, and deleting requirements that are no longer considered current with industry practice. As a result of the evaluation, ComEd has elected to upgrade both the Dresden and Quad Cities TS to the STS contained in NUREG-0123.

The TSUP for Dresden and Quad Cities is not a complete adaptation of the STS. The TSUP focuses on (1) the integration of additional information such as equipment operability requirements during shutdown conditions, (2) clarification of requirements such as limiting conditions for operations and action statements utilizing STS terminology, (3) deletion of superseded requirements and modifications to the TS based on the licensee's responses to Generic Letters (GL), and (4) relocation of specific items to more appropriate TS locations.

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This application and its supplements upgrade only sections 1.0 (Definitions), 3.0/4.0 (Applicability), and 3/4.3 (Reactivity) of the Dresden and Quad Cities TS. The staff evaluation of proposed TS 3/4.3 will be forwarded under a separate cover.

The review guidance to be used by the NRC staff in the review of the TSUP is described in Section 2 of the attached Safety Evaluation (SE). In the staff's review of the proposed amendments each change is evaluated and all deviations between the proposed TS and the STS are justified in detail in the attached SE. In no case did the licensee propose a relaxation of the licensing basis as stated in the Updated Final Safety Analysis Reports (UFSAR) for Dresden or Quad Cities.

Based on discussions between ComEd and the staff, it has been mutually agreed upon that the NRC will review the sections of TSUP as they are submitted and provide ComEd an amendment for each submittal. Once all of the TSUP sections have been reviewed and the amendments issued, it is our understanding that ComEd will make one final submittal addressing any changes that may be required as a result of problems uncovered during the course of this effort. Upon receipt and review of this final submittal, the staff will issue a final amendment which addresses any remaining open items and any changes or corrections to the previous amendments. The applicable TSUP TS will be issued with each amendment and will become effective no later than December 31, 1995.

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,

Original signed by:

John F. Stang, Senior 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. 131 to DPR-19
- 2. Amendment No. 125 to DPR-25
- 3. Amendment No. 152 to DPR-29
- 4. Amendment No. 148 to DPR-30
- 5. Safety Evaluation

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DOCUMENT NAME: DRESDEN\DRQC8432.AMD

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DATE	11/31/95	11/30/95	1/30/95		2/16/95	2/6/95

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DATE	11/31/95	11/30/95	1/30/95		2/16/95	2/6/95

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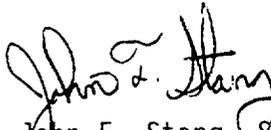
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cc w/encls: see next page

D. L. Farrar
Commonwealth Edison Company

Dresden Nuclear Power Station
Unit Nos. 2 and 3

cc:

Michael I. Miller, Esquire
Sidley and Austin
One First National Plaza
Chicago, Illinois 60690

Mr. Thomas P. Joyce
Site Vice President
Dresden Nuclear Power Station
6500 North Dresden Road
Morris, Illinois 60450-9765

Mr. J. Eenigenburg
Station Manager, Unit 2
Dresden Nuclear Power Station
6500 North Dresden Road
Morris, Illinois 60450-9765

Mr. D. Bax
Station Manager, Unit 3
Dresden Nuclear Power Station
6500 North Dresden Road
Morris, Illinois 60450-9765

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

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

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

D. L. Farrar
Commonwealth Edison Company

Quad Cities Nuclear Power Station
Unit Nos. 1 and 2

cc:

Mr. Stephen E. Shelton
Vice President
Iowa-Illinois Gas and
Electric Company
P. O. Box 4350
Davenport, Iowa 52808

Michael I. Miller, Esquire
Sidley and Austin
One First National Plaza
Chicago, Illinois 60690

Mr. L. William Pearce
Station Manager
Quad Cities Nuclear Power Station
22710 206th Avenue North
Cordova, Illinois 61242

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

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

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

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



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. 131
License No. DPR-19

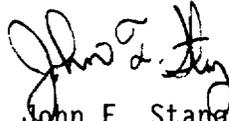
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated July 29, 1992, as supplemented January 14, 1993, and February 16, 1993, complies with the standards and requirements of the Atomic Energy Act 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:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 131, 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 no later than December 31, 1995.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stang, Senior 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: February 16, 1995



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. 125
License No. DPR-25

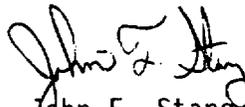
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 - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated July 29, 1992, as supplemented January 14, 1993, and February 16, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (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. 125, 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 no later than December 31, 1995.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stang, Senior 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: February 16, 1995

ATTACHMENT TO LICENSE AMENDMENT NOS. 131 AND 125

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 numbers.

<u>UNIT 2 REMOVE</u>	<u>UNIT 3 REMOVE</u>	<u>INSERT</u>
1.0-1	1.0-1	1-1
1.0-2	1.0-2	1-2
1.0-3	1.0-3	1-3
1.0-4	1.0-4	1-4
1.0-5	1.0-5	1-5
1.0-6	1.0-6	1-6
---	---	1-7
---	---	1-8
---	---	1-9
3.0-1	3.0-1	3/4.0-1
3.0-2	3.0-2	3/4.0-2
B 3.0-3	B 3.0-3	3/4.0-3
---	---	B 3/4.0-1
---	---	B 3/4.0-2
---	---	B 3/4.0-3
---	---	B 3/4.0-4
---	---	B 3/4.0-5
---	---	B 3/4.0-6

1.0 DEFINITIONS

The following terms are defined so that uniform interpretation of these specifications may be achieved. The defined terms appear in capitalized type and shall be applicable throughout these Technical Specifications.

ACTION

ACTION shall be that part of a Specification which prescribes remedial measures required under designated conditions.

AVERAGE PLANAR EXPOSURE (APE)

The **AVERAGE PLANAR EXPOSURE (APE)** shall be applicable to a specific planar height and is equal to the sum of the exposure of all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.

AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)

The **AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)** shall be applicable to a specific planar height and is equal to the sum of the **LINEAR HEAT GENERATION RATE(s)** for all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.

CHANNEL

A **CHANNEL** shall be an arrangement of a sensor and associated components used to evaluate plant variables and generate a single protective action signal. A **CHANNEL** terminates and loses its identity where single action signals are combined in a **TRIP SYSTEM** or logic system.

CHANNEL CALIBRATION

A **CHANNEL CALIBRATION** shall be the adjustment, as necessary, of the **CHANNEL** output such that it responds with the necessary range and accuracy to known values of the parameter which the **CHANNEL** monitors. The **CHANNEL CALIBRATION** shall encompass the entire **CHANNEL** including the required sensor and alarm and/or trip functions, and shall include the **CHANNEL FUNCTIONAL TEST**. The **CHANNEL CALIBRATION** may be performed by any series of sequential, overlapping or total **CHANNEL** steps such that the entire **CHANNEL** is calibrated.

CHANNEL CHECK

A **CHANNEL CHECK** shall be the qualitative assessment of **CHANNEL** behavior during operation by observation. This determination shall include, where possible, comparison of the **CHANNEL** indication and/or status with other indications and/or status derived from independent instrument **CHANNEL(s)** measuring the same parameter.

1.0 DEFINITIONS

CHANNEL FUNCTIONAL TEST

A CHANNEL FUNCTIONAL TEST shall be:

- a. Analog CHANNEL(s) - the injection of a simulated signal into the CHANNEL as close to the sensor as practicable to verify OPERABILITY including required alarm and/or trip functions and CHANNEL failure trips.
- b. Bistable CHANNEL(s) - the injection of a simulated signal into the sensor to verify OPERABILITY including required alarm and/or trip functions.

The CHANNEL FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total CHANNEL steps such that the entire CHANNEL is tested.

CORE ALTERATION

CORE ALTERATION shall be the addition, removal, relocation or movement of fuel, sources, incore instruments or reactivity controls within the reactor pressure vessel with the vessel head removed and fuel in the vessel. Normal movement (including replacement) of the SRMs, IRMs, TIPs, LPRMs, or special movable detectors is not considered a CORE ALTERATION. Suspension of CORE ALTERATION(s) shall not preclude completion of the movement of a component to a safe conservative position.

CORE OPERATING LIMITS REPORT (COLR)

The CORE OPERATING LIMITS REPORT (COLR) shall be the unit specific document that provides core operating limits for the current operating cycle. These cycle specific core operating limits shall be determined for each operating cycle in accordance with Specification 6.6. Plant operation within these operating limits is addressed in individual specifications.

CRITICAL POWER RATIO (CPR)

The CRITICAL POWER RATIO (CPR) shall be the ratio of that power in the assembly which is calculated by application of the applicable NRC approved critical power correlation to cause some point in the assembly to experience transition boiling, divided by the actual assembly power.

DOSE EQUIVALENT I-131

DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcurie/gram) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors For Power and Test Reactor Sites."

FRACTION OF RATED THERMAL POWER (FRTP)

The FRACTION OF RATED THERMAL POWER (FRTP) shall be the measured THERMAL POWER divided by the RATED THERMAL POWER.

1.0 DEFINITIONS

FREQUENCY NOTATION

The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1-1.

FUEL DESIGN LIMITING RATIO (FDLRX)

The FUEL DESIGN LIMITING RATIO (FDLRX) shall be the limit used to assure that the fuel operates within the end-of-life steady-state design criteria by, among other items, limiting the release of fission gas to the cladding plenum.

FUEL DESIGN LIMITING RATIO for CENTERLINE MELT (FDLRC)

The FUEL DESIGN LIMITING RATIO for CENTERLINE MELT (FDLRC) shall be the limit used to assure that the fuel will neither experience centerline melt nor exceed 1% plastic cladding strain for transient overpower events beginning at any power and terminating at 120% of RATED THERMAL POWER.

IDENTIFIED LEAKAGE

IDENTIFIED LEAKAGE shall be: a) leakage into primary containment collection systems, such as pump seal or valve packing leaks, that is captured and conducted to a sump or collecting tank, or b) leakage into the primary containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of the leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE.

LIMITING CONTROL ROD PATTERN (LCRP)

A LIMITING CONTROL ROD PATTERN (LCRP) shall be a pattern which results in the core being on a thermal hydraulic limit, i.e., operating on a limiting value for APLHGR, LHGR, or MCPR.

LINEAR HEAT GENERATION RATE (LHGR)

LINEAR HEAT GENERATION RATE (LHGR) shall be the heat generation per unit length of fuel rod. It is the integral of the heat flux over the heat transfer area associated with the unit length.

LOGIC SYSTEM FUNCTIONAL TEST (LSFT)

A LOGIC SYSTEM FUNCTIONAL TEST (LSFT) shall be a test of all required logic components, i.e., all required relays and contacts, trip units, solid state logic elements, etc, of a logic circuit, from sensor through and including the actuated device, to verify OPERABILITY. The LOGIC SYSTEM FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total system steps such that the entire logic system is tested.

MINIMUM CRITICAL POWER RATIO (MCPR)

The MINIMUM CRITICAL POWER RATIO (MCPR) shall be the smallest CPR which exists in the core.

1.0 DEFINITIONS

OFFSITE DOSE CALCULATION MANUAL (ODCM)

The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Semi-annual Radioactive Effluent Release Reports required by Specification 6.6.

OPERABLE - OPERABILITY

A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s) and when all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

OPERATIONAL MODE

An OPERATIONAL MODE, i.e., MODE, shall be any one inclusive combination of mode switch position and average reactor coolant temperature as specified in Table 1-2.

PHYSICS TESTS

PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation and 1) described in Chapter 14 of the FSAR, 2) authorized under the provisions of 10 CFR 50.59, or 3) otherwise approved by the Commission.

PRESSURE BOUNDARY LEAKAGE

PRESSURE BOUNDARY LEAKAGE shall be leakage through a non-isolable fault in a reactor coolant system component body, pipe wall or vessel wall.

1.0 DEFINITIONS

PRIMARY CONTAINMENT INTEGRITY (PCI)

PRIMARY CONTAINMENT INTEGRITY (PCI) shall exist when:

- a. All primary containment penetrations required to be closed during accident conditions are either:
 - 1) Capable of being closed by an OPERABLE primary containment automatic isolation valve system, or
 - 2) Closed by at least one manual valve, blind flange, or deactivated automatic valve secured in its closed position, except for valves that are open under administrative control as permitted by Specification 3.7.D.
- b. All primary containment equipment hatches are closed and sealed.
- c. Each primary containment air lock is in compliance with the requirements of Specification 3.7.C.
- d. The primary containment leakage rates are within the limits of Specification 3.7.B.
- e. The suppression chamber is in compliance with the requirements of Specification 3.7.K.
- f. The sealing mechanism associated with each primary containment penetration; e.g., welds, bellows or O-rings, is OPERABLE.

PROCESS CONTROL PROGRAM (PCP)

The PROCESS CONTROL PROGRAM (PCP) shall contain the current formulas, sampling, analysis, test, and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61, and 71, State regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.

RATED THERMAL POWER (RTP)

RATED THERMAL POWER (RTP) shall be a total reactor core heat transfer rate to the reactor coolant of 2527 MWT.

REPORTABLE EVENT

A REPORTABLE EVENT shall be any of those conditions specified in Section 50.73 to 10 CFR Part 50.

1.0 DEFINITIONS

SECONDARY CONTAINMENT INTEGRITY (SCI)

SECONDARY CONTAINMENT INTEGRITY (SCI) shall exist when:

- a. All secondary containment penetrations required to be closed during accident conditions are either:
 - 1) Capable of being closed by an OPERABLE secondary containment automatic isolation valve system, or
 - 2) Closed by at least one manual valve, blind flange, or deactivated automatic damper secured in its closed position, except as permitted by Specification 3.7.O.
- b. All secondary containment hatches and blowout panels are closed and sealed.
- c. The standby gas treatment system is in compliance with the requirements of Specification 3.7.P.
- d. At least one door in each access to the secondary containment is closed.
- e. The sealing mechanism associated with each secondary containment penetration; e.g., welds, bellows or O-rings, is OPERABLE.
- f. The pressure within the secondary containment is less than or equal to the value required by Specification 4.7.N.1.

SHUTDOWN MARGIN (SDM)

SHUTDOWN MARGIN (SDM) shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming all control rods are fully inserted except for the single control rod of highest reactivity worth which is assumed to be fully withdrawn and the reactor is in the shutdown condition; cold, i.e. 68°F; and xenon free.

SOURCE CHECK

A SOURCE CHECK shall be the qualitative assessment of CHANNEL response when the CHANNEL sensor is exposed to a radioactive source.

STEADY STATE LINEAR HEAT GENERATION RATE (SLHGR)

The STEADY STATE LINEAR HEAT GENERATION RATE (SLHGR) shall be the limit which protects against exceeding the fuel end-of-life steady state design criteria.

THERMAL POWER

THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

1.0 DEFINITIONS

TRANSIENT LINEAR HEAT GENERATION RATE (TLHGR)

The TRANSIENT LINEAR HEAT GENERATION RATE (TLHGR) shall be the limit which protects against fuel centerline melting and 1% plastic cladding strain during transient conditions throughout the life of the fuel.

TRIP SYSTEM

A TRIP SYSTEM shall be an arrangement of instrument CHANNEL trip signals and auxiliary equipment required to initiate action to accomplish a protective trip function. A TRIP SYSTEM may require one or more instrument CHANNEL trip signals related to one or more plant parameters in order to initiate TRIP SYSTEM action. Initiation of protective action may require the tripping of a single TRIP SYSTEM or the coincident tripping of two TRIP SYSTEMS.

UNIDENTIFIED LEAKAGE

UNIDENTIFIED LEAKAGE shall be all leakage in the primary containment which is not IDENTIFIED LEAKAGE.

TABLE 1-1SURVEILLANCE FREQUENCY NOTATION

	<u>NOTATION</u>	<u>FREQUENCY</u>
1. Shift	S	At least once per 12 hours
2. Day	D	At least once per 24 hours
3. Week	W	At least once per 7 days
4. Month	M	At least once per 31 days
5. Quarter	Q	At least once per 92 days
6. Semiannual	SA	At least once per 184 days
7. Annual	A	At least once per 366 days
8. Sesquiannual	E	At least once per 18 months (550 days)
9. Startup	S/U	Prior to each reactor startup
10. Not Applicable	N.A.	Not applicable

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
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 or Startup/Hot Standby 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 and 3.12.B.
- (e) The reactor mode switch may be placed in the Refuel position while a single control rod is being recoupled or withdrawn 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.

3.0 - LIMITING CONDITIONS FOR OPERATION

- A. Compliance with the Limiting Conditions for Operation contained in the succeeding Specifications is required during the OPERATIONAL MODE(s) or other conditions specified therein; except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met.

- B. Noncompliance with a Specification shall exist when the requirements of the Limiting Condition for Operation and associated ACTION requirements are not met within the specified time intervals. If the Limiting Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.

- C. When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour ACTION shall be initiated to place the unit in an OPERATIONAL MODE in which the Specification does not apply by placing it, as applicable, in:
 - 1. At least HOT SHUTDOWN within the next 12 hours, and
 - 2. At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual Specifications.

This Specification is not applicable in OPERATIONAL MODE 4 or 5.

- D. Entry into an OPERATIONAL MODE or other specified condition shall not be made when the conditions for the Limiting Conditions for Operation are not met and the associated ACTION requires placing the plant in an OPERATIONAL MODE or other specified condition of operation in which the Limiting Condition for Operation does not apply if they are not met within a specified time interval. Entry into an OPERATIONAL MODE or other specified condition may be made in accordance with the ACTION requirements when conformance to them permits continued operation of the facility for an unlimited period of time. This provision shall not prevent passage through or to OPERATIONAL MODE(s) as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual Specifications.

4.0 - SURVEILLANCE REQUIREMENTS

- A. Surveillance Requirements shall be met during the reactor OPERATIONAL MODE(s) or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.
- B. Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the surveillance interval.
- C. Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.B, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance requirements do not have to be performed on inoperable equipment.
- D. Entry into an OPERATIONAL MODE or other specified applicable condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the applicable surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL MODE(s) as required to comply with ACTION requirements.
- E. Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:
 - 1. Inservice Inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR Part 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR Part 50, Section 50.55a(g)(6)(i).

4.0 - SURVEILLANCE REQUIREMENTS

2. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda for the inservice inspection and testing activities required by the ASME Boiler and Pressure Vessel Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

<u>ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice inspection and testing activities</u>	<u>Required Frequencies for performing inservice inspection and testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days

3. The provisions of Specification 4.0.B are applicable to the above required frequencies for performing inservice inspection and testing activities.
4. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.
5. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any Technical Specification.
6. The Inservice Inspection Program for piping identified in NRC Generic Letter 88-01 shall be performed in accordance with the staff positions on schedule, methods, and personnel and sample expansion included in Generic Letter 88-01 or in accordance with alternate measures approved by the NRC staff.

BASES

Specifications 3.0.A through 3.0.D establish the general requirements applicable to Limiting Conditions for Operation. These requirements are based on the requirements for Limiting Conditions for Operation stated in the Code of Federal Regulations, 10 CFR 50.36(c)(2):

"Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification until the condition can be met."

Specification 3.0.A establishes the Applicability statement within each individual specification as the requirement for when (i.e., in which OPERATIONAL MODE(s) or other specified conditions) conformance to the Limiting Conditions for Operation is required for safe operation of the facility. The ACTION requirements establish those remedial measures that must be taken within specified time limits when the requirements of a Limiting Condition for Operation are not met. It is not intended that the shutdown ACTION requirements be used as an operational convenience which permits (routine) voluntary removal of a system(s) or component(s) from service in lieu of other alternatives that would not result in redundant systems or components being inoperable.

There are two basic types of ACTION requirements. The first specifies the remedial measures that permit continued operation of the facility which is not further restricted by the time limits of the ACTION requirements. In this case, conformance to the ACTION requirements provides an acceptable level of safety for unlimited continued operation as long as the ACTION requirements continue to be met. The second type of ACTION requirement specifies a time limit in which conformance to the conditions of the Limiting Condition for Operation must be met. This time limit is the allowable outage time to restore an inoperable system or component to OPERABLE status or for restoring parameters within specified limits. If these ACTION(s) are not completed within the allowable outage time limits, a shutdown is required to place the facility in a reactor OPERATIONAL MODE or other specified condition in which the specification no longer applies.

The specified time limits of the ACTION requirements are applicable from the point in time it is identified that a Limiting Condition for Operation is not met. The time limits of the ACTION requirements are also applicable when a system or component is removed from service for surveillance testing or investigation of operational problems. Individual specifications may include a specified time limit for the completion of a Surveillance Requirement when equipment is removed from service. In this case, the allowable outage time limits of the ACTION requirements are applicable when this limit expires if the surveillance has not been completed. When a shutdown is required to comply with ACTION requirements, the plant may have entered an OPERATIONAL MODE in which a new specification becomes applicable. In this case, the time limits of the ACTION requirements would apply from the point in time that the new specification becomes applicable if the requirements of the Limiting Condition for Operation are not met.

Specification 3.0.B establishes that noncompliance with a specification exists when the requirements of the Limiting Condition for Operation are not met and the associated ACTION

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requirements have not been implemented within the specified time interval. The purpose of this specification is to clarify that (1) implementation of the ACTION requirement within the specified time interval constitutes compliance with a specification and (2) completion of the remedial measures of the ACTION requirements is not required when compliance with a Limiting Condition for Operation is restored within the time interval specified in the associated ACTION requirements.

Specification 3.0.C establishes the shutdown ACTION requirements that must be implemented when a Limiting Condition for Operation is not met and the condition is not specifically addressed by the associated ACTION requirements. The purpose of this specification is to delineate the time limits for placing the unit in a safe shutdown condition when plant operation cannot be maintained within the limits for safe operation defined by the Limiting Condition for Operation and its ACTION requirements. It is not intended to be used as an operational convenience which permits (routine) voluntary removal of redundant systems or components from service in lieu of other alternatives that would not result in redundant systems or components being inoperable. One hour is allowed to prepare for an orderly shutdown before initiating a change in plant operation. This time permits the operator to coordinate the reduction in electrical generation with the load dispatcher to ensure the stability and availability of the electrical grid. The time limits specified to reach lower MODE(s) of operation permit the shutdown to proceed in a controlled and orderly manner that is well within the specified maximum cooldown rate and within the cooldown capabilities of the facility assuming only the minimum required equipment is OPERABLE. This reduces thermal stresses on components of the primary coolant system and the potential for a plant transient that could challenge safety systems under conditions for which this specification applies.

If remedial measures permitting limited continued operation of the facility under the provisions of the ACTION requirements are completed, the shutdown may be terminated. The time limits of the ACTION requirements are applicable from the point in time there was a failure to meet a Limiting Condition for Operation. Therefore, the shutdown may be terminated if the ACTION requirements have been met or the time limits of the ACTION requirements have not expired, thus providing an allowance for the completion of the required ACTION(s).

The time limits of Specification 3.0.C allow 37 hours for the plant to be in COLD SHUTDOWN when a shutdown is required during POWER OPERATION. If the plant is in a lower MODE of operation when a shutdown is required, the time limit for reaching the next lower MODE applies. However, if a lower MODE of operation is reached in less time than allowed, the total allowable time to reach COLD SHUTDOWN, or other OPERATIONAL MODE, is not reduced. For example, if HOT SHUTDOWN is reached in 10 hours, the time allowed to reach COLD SHUTDOWN is the next 27 hours because the total time to reach COLD SHUTDOWN is not reduced from the allowable limit of 37 hours. Therefore, if remedial measures are completed that would permit a return to POWER OPERATION, a penalty is not incurred by having to reach a lower MODE of operation in less than the total time allowed.

The same principle applies with regard to the allowable outage time limits of the ACTION requirements, if compliance with the ACTION requirements for one specification results in entry into an OPERATIONAL MODE or condition of operation for another specification in which the

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requirements of the Limiting Condition for Operation are not met. If the new specification becomes applicable in less time than specified, the difference may be added to the allowable outage time limits of the second specification. However, the allowable outage time limits of ACTION requirements for a higher MODE of operation may not be used to extend the allowable outage time that is applicable when a Limiting Condition for Operation is not met in a lower MODE of operation.

The shutdown requirements of Specification 3.0.C do not apply in MODES 4 or 5, because the ACTION requirements of individual specifications define the remedial measures to be taken.

Specification 3.0.D establishes limitations on a change in OPERATIONAL MODE(s) when a Limiting Condition for Operation is not met. It precludes placing the facility in a higher MODE of operation when the requirements for a Limiting Condition for Operation are not met and continued noncompliance to these conditions would result in placing the plant in an OPERATIONAL MODE or other specified condition of operation in which the Limiting Condition for Operation does not apply to comply with the ACTION requirements if a change in MODE(s) were permitted. The purpose of this specification is to ensure that facility operation is not initiated or that higher MODE(s) of operation or other specified conditions are not entered when corrective ACTION is being taken to obtain compliance with a specification by restoring equipment to OPERABLE status or parameters to specified limits. Compliance with ACTION requirements that permit continued operation of the facility for an unlimited period of time provides an acceptable level of safety for continued operation without regard to the status of the plant before or after a change in OPERATIONAL MODE(s). Therefore, in this case, entry into an OPERATIONAL MODE or other specified condition may be made in accordance with the provisions of the ACTION requirements. The provisions of this specification should not, however, be interpreted as endorsing the failure to exercise good practice in restoring systems or components to OPERABLE status before plant startup.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 3.0.D do not apply because they would delay placing the facility in a lower MODE of operation.

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Specifications 4.0.A through 4.0.E establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

"Surveillance requirements are requirements relating to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

Specification 4.0.A establishes the requirement that surveillances must be performed during the OPERATIONAL MODE(s) or other conditions for which the requirements of the Limiting Condition for Operation apply unless otherwise stated in an individual Surveillance Requirement. The purpose of this specification is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits to ensure safe operation of the facility when the plant is in a reactor OPERATIONAL MODE or other specified condition for which the individual Limiting Condition for Operations are applicable. Surveillance Requirements do not have to be performed when the facility is in an OPERATIONAL MODE for which the requirements of the associated Limiting Condition for Operation do not apply unless otherwise specified. The Surveillance Requirements associated with a Special Test Exception are only applicable when the Special Test Exception is used as an allowable exception to the requirements of a specification.

Specification 4.0.B establishes the limit for which the specified time interval for Surveillance Requirements may be extended. It permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance; e.g., transient conditions or other ongoing surveillance or maintenance activities. It also provides flexibility to accommodate the length of a fuel cycle for surveillances that are specified with and 18 month surveillance interval. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillances that are not performed during refueling outages. Likewise, it is not the intent that refueling outage surveillances be performed during power operation unless it is consistent with safe plant operation. The limitation of Specification 4.0.B is based on engineering judgment and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. This provision is sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

Specification 4.0.C establishes that the failure to satisfy a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.B, is a condition that constitutes a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. Under the provisions of this specification, systems and components are assumed to be OPERABLE when Surveillance Requirements have been satisfactorily performed within the specified time

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interval. However, nothing in this provision is to be construed as implying that systems or components are OPERABLE when they are found or known to be inoperable although still meeting the Surveillance Requirements. This specification also clarifies that the ACTION requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the ACTION requirements apply from the point in time it is identified that a surveillance has not been performed and not at the time that the allowed surveillance interval was exceeded. Completion of the Surveillance Requirement within the allowable outage time limits of the ACTION requirements restores compliance with the requirements of Specification 4.0.C. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification 4.0.B, was a violation of the OPERABILITY requirements for a Limiting Condition for Operation that is subject to enforcement action. The failure to perform a surveillance within the provisions of Specification 4.0.B is a violation of a Technical Specification requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plant's Technical Specifications.

If the allowable outage time limits of the ACTION requirements are less than 24 hours or a shutdown is required to comply with ACTION requirements (e.g., in Specification 3.0.C), a 24-hour allowance is provided to permit a delay in implementing the ACTION requirements. This provides an adequate time limit to complete Surveillance Requirements that have not been performed. The purpose of this allowance is to permit the completion of a surveillance before a shutdown would be required to comply with ACTION requirements or before other remedial measures would be required that may preclude the completion of a surveillance. The basis for this allowance includes consideration for plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in completing the required surveillance. This provision also provides a time limit for the completion of Surveillance Requirements that become applicable as a consequence of MODE changes imposed by ACTION requirements and for completing Surveillance Requirements that are applicable when an exception to the requirements of Specification 4.0.D is allowed. If a surveillance is not completed within the 24-hour allowance, the time limits of the ACTION requirements are applicable at that time. When a surveillance is performed within the 24-hour allowance and the Surveillance Requirements are not met, the time limits of the ACTION requirements are applicable at the time that the surveillance is terminated.

Surveillance Requirements do not have to be performed on inoperable equipment because the ACTION requirements define the remedial measures that apply. However, the Surveillance Requirements have to be met to demonstrate that inoperable equipment has been restored to OPERABLE status.

Specification 4.0.D establishes the requirement that all applicable surveillances must be met before entry into an OPERATIONAL MODE or other condition of operation specified in the Applicability statement. The purpose of this specification is to ensure that system and component OPERABILITY requirements or parameter limits are met before entry into an OPERATIONAL MODE or other specified condition for which these systems and components ensure safe operation of the

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facility. This provision applies to changes in OPERATIONAL MODE(s) or other specified conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable Surveillance Requirements must be performed within the specified surveillance interval to assure that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with ACTION statements, the provisions of Specification 4.0.D do not apply because this would delay placing the facility in a lower MODE of operation.

Specification 4.0.E establishes the requirement that inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a. These requirements apply except when relief has been provided in writing by the Commission.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout the Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. The requirements of Specification 4.0.D to perform surveillance requirements before entry into an OPERATIONAL MODE or other specified condition takes precedence over the ASME Boiler and Pressure Vessel Code provision that allows pumps and valves to be tested up to one week after return to normal operation. The Technical Specification definition of OPERABLE does not allow a grace period before a component, which is not capable of performing its specified function, is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision that allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

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interval. However, nothing in this provision is to be construed as implying that systems or components are OPERABLE when they are found or known to be inoperable although still meeting the Surveillance Requirements. This specification also clarifies that the ACTION requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the ACTION requirements apply from the point in time it is identified that a surveillance has not been performed and not at the time that the allowed surveillance interval was exceeded. Completion of the Surveillance Requirement within the allowable outage time limits of the ACTION requirements restores compliance with the requirements of Specification 4.0.C. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification 4.0.B, was a violation of the OPERABILITY requirements for a Limiting Condition for Operation that is subject to enforcement action. The failure to perform a surveillance within the provisions of Specification 4.0.B is a violation of a Technical Specification requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plant's Technical Specifications.

If the allowable outage time limits of the ACTION requirements are less than 24 hours or a shutdown is required to comply with ACTION requirements (e.g., in Specification 3.0.C), a 24-hour allowance is provided to permit a delay in implementing the ACTION requirements. This provides an adequate time limit to complete Surveillance Requirements that have not been performed. The purpose of this allowance is to permit the completion of a surveillance before a shutdown would be required to comply with ACTION requirements or before other remedial measures would be required that may preclude the completion of a surveillance. The basis for this allowance includes consideration for plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in completing the required surveillance. This provision also provides a time limit for the completion of Surveillance Requirements that become applicable as a consequence of MODE changes imposed by ACTION requirements and for completing Surveillance Requirements that are applicable when an exception to the requirements of Specification 4.0.D is allowed. If a surveillance is not completed within the 24-hour allowance, the time limits of the ACTION requirements are applicable at that time. When a surveillance is performed within the 24-hour allowance and the Surveillance Requirements are not met, the time limits of the ACTION requirements are applicable at the time that the surveillance is terminated.

Surveillance Requirements do not have to be performed on inoperable equipment because the ACTION requirements define the remedial measures that apply. However, the Surveillance Requirements have to be met to demonstrate that inoperable equipment has been restored to OPERABLE status.

Specification 4.0.D establishes the requirement that all applicable surveillances must be met before entry into an OPERATIONAL MODE or other condition of operation specified in the Applicability statement. The purpose of this specification is to ensure that system and component OPERABILITY requirements or parameter limits are met before entry into an OPERATIONAL MODE or other specified condition for which these systems and components ensure safe operation of the

BASES

facility. This provision applies to changes in OPERATIONAL MODE(s) or other specified conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable Surveillance Requirements must be performed within the specified surveillance interval to assure that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with ACTION statements, the provisions of Specification 4.0.D do not apply because this would delay placing the facility in a lower MODE of operation.

Specification 4.0.E establishes the requirement that inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a. These requirements apply except when relief has been provided in writing by the Commission.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout the Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. The requirements of Specification 4.0.D to perform surveillance requirements before entry into an OPERATIONAL MODE or other specified condition takes precedence over the ASME Boiler and Pressure Vessel Code provision that allows pumps and valves to be tested up to one week after return to normal operation. The Technical Specification definition of OPERABLE does not allow a grace period before a component, which is not capable of performing its specified function, is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision that allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.



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

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 152
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 July 29, 1992, as supplemented January 14, 1993, and February 16, 1993, 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. 152, 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 no later than December 31, 1995.

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: February 16, 1995



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

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 148
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 July 29, 1992, as supplemented January 14, 1993, and February 16, 1993, 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. 148, 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 no later than December 31, 1995.

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: February 16, 1995

ATTACHMENT TO LICENSE AMENDMENT NOS. 152 AND 148

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 numbers.

<u>UNIT 1 REMOVE</u>	<u>UNIT 2 REMOVE</u>	<u>INSERT</u>
1.0-1	1.0-1	1-1
1.0-2	1.0-2	1-2
1.0-3	1.0-3	1-3
1.0-4	1.0-4	1-4
1.0-5	1.0-5	1-5
1.0-6	---	1-6
---	---	1-7
---	---	1-8
---	---	1-9
3.0/4.0-1	3.0/4.0-1	3/4.0-1
3.0/4.0-2	3.0/4.0-2	3/4.0-2
---	B 3.0/4.0-3	3/4.0-3
---	---	B 3/4.0-1
---	---	B 3/4.0-2
---	---	B 3/4.0-3
---	---	B 3/4.0-4
---	---	B 3/4.0-5
---	---	B 3/4.0-6

1.0 DEFINITIONS

The following terms are defined so that uniform interpretation of these specifications may be achieved. The defined terms appear in capitalized type and shall be applicable throughout these Technical Specifications.

ACTION

ACTION shall be that part of a Specification which prescribes remedial measures required under designated conditions.

AVERAGE PLANAR EXPOSURE (APE)

The **AVERAGE PLANAR EXPOSURE (APE)** shall be applicable to a specific planar height and is equal to the sum of the exposure of all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.

AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)

The **AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)** shall be applicable to a specific planar height and is equal to the sum of the **LINEAR HEAT GENERATION RATE(s)** for all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.

CHANNEL

A **CHANNEL** shall be an arrangement of a sensor and associated components used to evaluate plant variables and generate a single protective action signal. A **CHANNEL** terminates and loses its identity where single action signals are combined in a **TRIP SYSTEM** or logic system.

CHANNEL CALIBRATION

A **CHANNEL CALIBRATION** shall be the adjustment, as necessary, of the **CHANNEL** output such that it responds with the necessary range and accuracy to known values of the parameter which the **CHANNEL** monitors. The **CHANNEL CALIBRATION** shall encompass the entire **CHANNEL** including the required sensor and alarm and/or trip functions, and shall include the **CHANNEL FUNCTIONAL TEST**. The **CHANNEL CALIBRATION** may be performed by any series of sequential, overlapping or total **CHANNEL** steps such that the entire **CHANNEL** is calibrated.

CHANNEL CHECK

A **CHANNEL CHECK** shall be the qualitative assessment of **CHANNEL** behavior during operation by observation. This determination shall include, where possible, comparison of the **CHANNEL** indication and/or status with other indications and/or status derived from independent instrument **CHANNEL(s)** measuring the same parameter.

1.0 DEFINITIONS

CHANNEL FUNCTIONAL TEST

A CHANNEL FUNCTIONAL TEST shall be:

- a. Analog CHANNEL(s) - the injection of a simulated signal into the CHANNEL as close to the sensor as practicable to verify OPERABILITY including required alarm and/or trip functions and CHANNEL failure trips.
- b. Bistable CHANNEL(s) - the injection of a simulated signal into the sensor to verify OPERABILITY including required alarm and/or trip functions.

The CHANNEL FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total CHANNEL steps such that the entire CHANNEL is tested.

CORE ALTERATION

CORE ALTERATION shall be the addition, removal, relocation or movement of fuel, sources, incore instruments or reactivity controls within the reactor pressure vessel with the vessel head removed and fuel in the vessel. Normal movement (including replacement) of the SRMs, IRMs, TIPs, LPRMs, or special movable detectors is not considered a CORE ALTERATION. Suspension of CORE ALTERATION(s) shall not preclude completion of the movement of a component to a safe conservative position.

CORE OPERATING LIMITS REPORT (COLR)

The CORE OPERATING LIMITS REPORT (COLR) shall be the unit specific document that provides core operating limits for the current operating cycle. These cycle specific core operating limits shall be determined for each operating cycle in accordance with Specification 6.6. Plant operation within these operating limits is addressed in individual specifications.

CRITICAL POWER RATIO (CPR)

The CRITICAL POWER RATIO (CPR) shall be the ratio of that power in the assembly which is calculated by application of the applicable NRC approved critical power correlation to cause some point in the assembly to experience transition boiling, divided by the actual assembly power.

DOSE EQUIVALENT I-131

DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcurie/gram) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors For Power and Test Reactor Sites."

FRACTION OF LIMITING POWER DENSITY (FLPD)

The FRACTION OF LIMITING POWER DENSITY (FLPD) shall be the LHGR existing at a given location divided by the specified LHGR limit for that bundle.

1.0 DEFINITIONS

FRACTION OF RATED THERMAL POWER (FRTP)

The FRACTION OF RATED THERMAL POWER (FRTP) shall be the measured THERMAL POWER divided by the RATED THERMAL POWER.

FREQUENCY NOTATION

The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1-1.

IDENTIFIED LEAKAGE

IDENTIFIED LEAKAGE shall be: a) leakage into primary containment collection systems, such as pump seal or valve packing leaks, that is captured and conducted to a sump or collecting tank, or b) leakage into the primary containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of the leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE.

LIMITING CONTROL ROD PATTERN (LCRP)

A LIMITING CONTROL ROD PATTERN (LCRP) shall be a pattern which results in the core being on a thermal hydraulic limit, i.e., operating on a limiting value for APLHGR, LHGR, or MCPR.

LINEAR HEAT GENERATION RATE (LHGR)

LINEAR HEAT GENERATION RATE (LHGR) shall be the heat generation per unit length of fuel rod. It is the integral of the heat flux over the heat transfer area associated with the unit length.

LOGIC SYSTEM FUNCTIONAL TEST (LSFT)

A LOGIC SYSTEM FUNCTIONAL TEST (LSFT) shall be a test of all required logic components, i.e., all required relays and contacts, trip units, solid state logic elements, etc, of a logic circuit, from sensor through and including the actuated device, to verify OPERABILITY. The LOGIC SYSTEM FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total system steps such that the entire logic system is tested.

MAXIMUM FRACTION OF LIMITING POWER DENSITY (MFLPD)

The MAXIMUM FRACTION OF LIMITING POWER DENSITY (MFLPD) shall be the highest value of the FLPD which exists in the core.

MINIMUM CRITICAL POWER RATIO (MCPR)

The MINIMUM CRITICAL POWER RATIO (MCPR) shall be the smallest CPR which exists in the core for each class of fuel.

1.0 DEFINITIONS

OFFSITE DOSE CALCULATION MANUAL (ODCM)

The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Semi-annual Radioactive Effluent Release Reports required by Specification 6.6.

OPERABLE - OPERABILITY

A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s) and when all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

OPERATIONAL MODE

An OPERATIONAL MODE, i.e., MODE, shall be any one inclusive combination of mode switch position and average reactor coolant temperature as specified in Table 1-2.

PHYSICS TESTS

PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation and 1) described in Chapter 14 of the FSAR, 2) authorized under the provisions of 10 CFR 50.59, or 3) otherwise approved by the Commission.

PRESSURE BOUNDARY LEAKAGE

PRESSURE BOUNDARY LEAKAGE shall be leakage through a non-isolable fault in a reactor coolant system component body, pipe wall or vessel wall.

1.0 DEFINITIONS

PRIMARY CONTAINMENT INTEGRITY (PCI)

PRIMARY CONTAINMENT INTEGRITY (PCI) shall exist when:

- a. All primary containment penetrations required to be closed during accident conditions are either:
 - 1) Capable of being closed by an OPERABLE primary containment automatic isolation valve system, or
 - 2) Closed by at least one manual valve, blind flange, or deactivated automatic valve secured in its closed position, except for valves that are open under administrative control as permitted by Specification 3.7.D.
- b. All primary containment equipment hatches are closed and sealed.
- c. Each primary containment air lock is in compliance with the requirements of Specification 3.7.C.
- d. The primary containment leakage rates are within the limits of Specification 3.7.B.
- e. The suppression chamber is in compliance with the requirements of Specification 3.7.K.
- f. The sealing mechanism associated with each primary containment penetration; e.g., welds, bellows or O-rings, is OPERABLE.

PROCESS CONTROL PROGRAM (PCP)

The PROCESS CONTROL PROGRAM (PCP) shall contain the current formulas, sampling, analysis, test, and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61, and 71, State regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.

RATED THERMAL POWER (RTP)

RATED THERMAL POWER (RTP) shall be a total reactor core heat transfer rate to the reactor coolant of 2511 MWT.

REPORTABLE EVENT

A REPORTABLE EVENT shall be any of those conditions specified in Section 50.73 to 10 CFR Part 50.

ROD DENSITY

ROD DENSITY shall be the number of control rod notches inserted as a fraction of the total number of control rod notches. All rods fully inserted is equivalent to 100% ROD DENSITY.

1.0 DEFINITIONS

SECONDARY CONTAINMENT INTEGRITY (SCI)

SECONDARY CONTAINMENT INTEGRITY (SCI) shall exist when:

- a. All secondary containment penetrations required to be closed during accident conditions are either:
 - 1) Capable of being closed by an OPERABLE secondary containment automatic isolation valve system, or
 - 2) Closed by at least one manual valve, blind flange, or deactivated automatic damper secured in its closed position, except as permitted by Specification 3.7.O.
- b. All secondary containment hatches and blowout panels are closed and sealed.
- c. The standby gas treatment system is in compliance with the requirements of Specification 3.7.P.
- d. At least one door in each access to the secondary containment is closed.
- e. The sealing mechanism associated with each secondary containment penetration; e.g., welds, bellows or O-rings, is OPERABLE.
- f. The pressure within the secondary containment is less than or equal to the value required by Specification 4.7.N.1.

SHUTDOWN MARGIN (SDM)

SHUTDOWN MARGIN (SDM) shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming all control rods are fully inserted except for the single control rod of highest reactivity worth which is assumed to be fully withdrawn and the reactor is in the shutdown condition; cold, i.e. 68°F; and xenon free.

SOURCE CHECK

A SOURCE CHECK shall be the qualitative assessment of CHANNEL response when the CHANNEL sensor is exposed to a radioactive source.

THERMAL POWER

THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

TRIP SYSTEM

A TRIP SYSTEM shall be an arrangement of instrument CHANNEL trip signals and auxiliary equipment required to initiate action to accomplish a protective trip function. A TRIP SYSTEM may require one or more instrument CHANNEL trip signals related to one or more plant parameters in order to initiate TRIP SYSTEM action. Initiation of protective action may require the tripping of a single TRIP SYSTEM or the coincident tripping of two TRIP SYSTEMS.

1.0 DEFINITIONS

UNIDENTIFIED LEAKAGE

UNIDENTIFIED LEAKAGE shall be all leakage which is not IDENTIFIED LEAKAGE.

TABLE 1-1
SURVEILLANCE FREQUENCY NOTATION

	<u>NOTATION</u>	<u>FREQUENCY</u>
1. Shift	S	At least once per 12 hours
2. Day	D	At least once per 24 hours
3. Week	W	At least once per 7 days
4. Month	M	At least once per 31 days
5. Quarter	Q	At least once per 92 days
6. Semiannual	SA	At least once per 184 days
7. Annual	A	At least once per 366 days
8. Sesquiannual	E	At least once per 18 months (550 days)
9. Startup	S/U	Prior to each reactor startup
10. Not Applicable	N.A.	Not applicable

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
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 or Startup/Hot Standby 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 and 3.12.B.
- (e) The reactor mode switch may be placed in the Refuel position while a single control rod is being recoupled or withdrawn 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.

3.0 - LIMITING CONDITIONS FOR OPERATION

- A. Compliance with the Limiting Conditions for Operation contained in the succeeding Specifications is required during the OPERATIONAL MODE(s) or other conditions specified therein; except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met.
- B. Noncompliance with a Specification shall exist when the requirements of the Limiting Condition for Operation and associated ACTION requirements are not met within the specified time intervals. If the Limiting Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.
- C. When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour ACTION shall be initiated to place the unit in an OPERATIONAL MODE in which the Specification does not apply by placing it, as applicable, in:
 - 1. At least HOT SHUTDOWN within the next 12 hours, and
 - 2. At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual Specifications.

This Specification is not applicable in OPERATIONAL MODE 4 or 5.

- D. Entry into an OPERATIONAL MODE or other specified condition shall not be made when the conditions for the Limiting Conditions for Operation are not met and the associated ACTION requires placing the plant in an OPERATIONAL MODE or other specified condition of operation in which the Limiting Condition for Operation does not apply if they are not met within a specified time interval. Entry into an OPERATIONAL MODE or other specified condition may be made in accordance with the ACTION requirements when conformance to them permits continued operation of the facility for an unlimited period of time. This provision shall not prevent passage through or to OPERATIONAL MODE(s) as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual Specifications.

4.0 - SURVEILLANCE REQUIREMENTS

- A. Surveillance Requirements shall be met during the reactor OPERATIONAL MODE(s) or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.
- B. Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the surveillance interval.
- C. Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.B, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance requirements do not have to be performed on inoperable equipment.
- D. Entry into an OPERATIONAL MODE or other specified applicable condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the applicable surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL MODE(s) as required to comply with ACTION requirements.
- E. Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:
 - 1. Inservice Inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR Part 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR Part 50, Section 50.55a(g)(6)(i).

4.0 - SURVEILLANCE REQUIREMENTS

2. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda for the inservice inspection and testing activities required by the ASME Boiler and Pressure Vessel Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

<u>ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice inspection and testing activities</u>	<u>Required Frequencies for performing inservice inspection and testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days

3. The provisions of Specification 4.0.B are applicable to the above required frequencies for performing inservice inspection and testing activities.
4. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.
5. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any Technical Specification.
6. The Inservice Inspection Program for piping identified in NRC Generic Letter 88-01 shall be performed in accordance with the staff positions on schedule, methods, and personnel and sample expansion included in Generic Letter 88-01 or in accordance with alternate measures approved by the NRC staff.

BASES

Specifications 3.0.A through 3.0.D establish the general requirements applicable to Limiting Conditions for Operation. These requirements are based on the requirements for Limiting Conditions for Operation stated in the Code of Federal Regulations, 10 CFR 50.36(c)(2):

"Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification until the condition can be met."

Specification 3.0.A establishes the Applicability statement within each individual specification as the requirement for when (i.e., in which OPERATIONAL MODE(s) or other specified conditions) conformance to the Limiting Conditions for Operation is required for safe operation of the facility. The ACTION requirements establish those remedial measures that must be taken within specified time limits when the requirements of a Limiting Condition for Operation are not met. It is not intended that the shutdown ACTION requirements be used as an operational convenience which permits (routine) voluntary removal of a system(s) or component(s) from service in lieu of other alternatives that would not result in redundant systems or components being inoperable.

There are two basic types of ACTION requirements. The first specifies the remedial measures that permit continued operation of the facility which is not further restricted by the time limits of the ACTION requirements. In this case, conformance to the ACTION requirements provides an acceptable level of safety for unlimited continued operation as long as the ACTION requirements continue to be met. The second type of ACTION requirement specifies a time limit in which conformance to the conditions of the Limiting Condition for Operation must be met. This time limit is the allowable outage time to restore an inoperable system or component to OPERABLE status or for restoring parameters within specified limits. If these ACTION(s) are not completed within the allowable outage time limits, a shutdown is required to place the facility in a reactor OPERATIONAL MODE or other specified condition in which the specification no longer applies.

The specified time limits of the ACTION requirements are applicable from the point in time it is identified that a Limiting Condition for Operation is not met. The time limits of the ACTION requirements are also applicable when a system or component is removed from service for surveillance testing or investigation of operational problems. Individual specifications may include a specified time limit for the completion of a Surveillance Requirement when equipment is removed from service. In this case, the allowable outage time limits of the ACTION requirements are applicable when this limit expires if the surveillance has not been completed. When a shutdown is required to comply with ACTION requirements, the plant may have entered an OPERATIONAL MODE in which a new specification becomes applicable. In this case, the time limits of the ACTION requirements would apply from the point in time that the new specification becomes applicable if the requirements of the Limiting Condition for Operation are not met.

Specification 3.0.B establishes that noncompliance with a specification exists when the requirements of the Limiting Condition for Operation are not met and the associated ACTION

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requirements have not been implemented within the specified time interval. The purpose of this specification is to clarify that (1) implementation of the ACTION requirement within the specified time interval constitutes compliance with a specification and (2) completion of the remedial measures of the ACTION requirements is not required when compliance with a Limiting Condition for Operation is restored within the time interval specified in the associated ACTION requirements.

Specification 3.0.C establishes the shutdown ACTION requirements that must be implemented when a Limiting Condition for Operation is not met and the condition is not specifically addressed by the associated ACTION requirements. The purpose of this specification is to delineate the time limits for placing the unit in a safe shutdown condition when plant operation cannot be maintained within the limits for safe operation defined by the Limiting Condition for Operation and its ACTION requirements. It is not intended to be used as an operational convenience which permits (routine) voluntary removal of redundant systems or components from service in lieu of other alternatives that would not result in redundant systems or components being inoperable. One hour is allowed to prepare for an orderly shutdown before initiating a change in plant operation. This time permits the operator to coordinate the reduction in electrical generation with the load dispatcher to ensure the stability and availability of the electrical grid. The time limits specified to reach lower MODE(s) of operation permit the shutdown to proceed in a controlled and orderly manner that is well within the specified maximum cooldown rate and within the cooldown capabilities of the facility assuming only the minimum required equipment is OPERABLE. This reduces thermal stresses on components of the primary coolant system and the potential for a plant transient that could challenge safety systems under conditions for which this specification applies.

If remedial measures permitting limited continued operation of the facility under the provisions of the ACTION requirements are completed, the shutdown may be terminated. The time limits of the ACTION requirements are applicable from the point in time there was a failure to meet a Limiting Condition for Operation. Therefore, the shutdown may be terminated if the ACTION requirements have been met or the time limits of the ACTION requirements have not expired, thus providing an allowance for the completion of the required ACTION(s).

The time limits of Specification 3.0.C allow 37 hours for the plant to be in COLD SHUTDOWN when a shutdown is required during POWER OPERATION. If the plant is in a lower MODE of operation when a shutdown is required, the time limit for reaching the next lower MODE applies. However, if a lower MODE of operation is reached in less time than allowed, the total allowable time to reach COLD SHUTDOWN, or other OPERATIONAL MODE, is not reduced. For example, if HOT SHUTDOWN is reached in 10 hours, the time allowed to reach COLD SHUTDOWN is the next 27 hours because the total time to reach COLD SHUTDOWN is not reduced from the allowable limit of 37 hours. Therefore, if remedial measures are completed that would permit a return to POWER OPERATION, a penalty is not incurred by having to reach a lower MODE of operation in less than the total time allowed.

The same principle applies with regard to the allowable outage time limits of the ACTION requirements, if compliance with the ACTION requirements for one specification results in entry into an OPERATIONAL MODE or condition of operation for another specification in which the

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requirements of the Limiting Condition for Operation are not met. If the new specification becomes applicable in less time than specified, the difference may be added to the allowable outage time limits of the second specification. However, the allowable outage time limits of ACTION requirements for a higher MODE of operation may not be used to extend the allowable outage time that is applicable when a Limiting Condition for Operation is not met in a lower MODE of operation.

The shutdown requirements of Specification 3.0.C do not apply in MODES 4 or 5, because the ACTION requirements of individual specifications define the remedial measures to be taken.

Specification 3.0.D establishes limitations on a change in OPERATIONAL MODE(s) when a Limiting Condition for Operation is not met. It precludes placing the facility in a higher MODE of operation when the requirements for a Limiting Condition for Operation are not met and continued noncompliance to these conditions would result in placing the plant in an OPERATIONAL MODE or other specified condition of operation in which the Limiting Condition for Operation does not apply to comply with the ACTION requirements if a change in MODE(s) were permitted. The purpose of this specification is to ensure that facility operation is not initiated or that higher MODE(s) of operation or other specified conditions are not entered when corrective ACTION is being taken to obtain compliance with a specification by restoring equipment to OPERABLE status or parameters to specified limits. Compliance with ACTION requirements that permit continued operation of the facility for an unlimited period of time provides an acceptable level of safety for continued operation without regard to the status of the plant before or after a change in OPERATIONAL MODE(s). Therefore, in this case, entry into an OPERATIONAL MODE or other specified condition may be made in accordance with the provisions of the ACTION requirements. The provisions of this specification should not, however, be interpreted as endorsing the failure to exercise good practice in restoring systems or components to OPERABLE status before plant startup.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 3.0.D do not apply because they would delay placing the facility in a lower MODE of operation.

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Specifications 4.0.A through 4.0.E establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

"Surveillance requirements are requirements relating to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

Specification 4.0.A establishes the requirement that surveillances must be performed during the OPERATIONAL MODE(s) or other conditions for which the requirements of the Limiting Condition for Operation apply unless otherwise stated in an individual Surveillance Requirement. The purpose of this specification is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits to ensure safe operation of the facility when the plant is in a reactor OPERATIONAL MODE or other specified condition for which the individual Limiting Condition for Operations are applicable. Surveillance Requirements do not have to be performed when the facility is in an OPERATIONAL MODE for which the requirements of the associated Limiting Condition for Operation do not apply unless otherwise specified. The Surveillance Requirements associated with a Special Test Exception are only applicable when the Special Test Exception is used as an allowable exception to the requirements of a specification.

Specification 4.0.B establishes the limit for which the specified time interval for Surveillance Requirements may be extended. It permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance; e.g., transient conditions or other ongoing surveillance or maintenance activities. It also provides flexibility to accommodate the length of a fuel cycle for surveillances that are specified with and 18 month surveillance interval. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillances that are not performed during refueling outages. Likewise, it is not the intent that refueling outage surveillances be performed during power operation unless it is consistent with safe plant operation. The limitation of Specification 4.0.B is based on engineering judgment and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. This provision is sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

Specification 4.0.C establishes that the failure to satisfy a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.B, is a condition that constitutes a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. Under the provisions of this specification, systems and components are assumed to be OPERABLE when Surveillance Requirements have been satisfactorily performed within the specified time

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interval. However, nothing in this provision is to be construed as implying that systems or components are OPERABLE when they are found or known to be inoperable although still meeting the Surveillance Requirements. This specification also clarifies that the ACTION requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the ACTION requirements apply from the point in time it is identified that a surveillance has not been performed and not at the time that the allowed surveillance interval was exceeded. Completion of the Surveillance Requirement within the allowable outage time limits of the ACTION requirements restores compliance with the requirements of Specification 4.0.C. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification 4.0.B, was a violation of the OPERABILITY requirements for a Limiting Condition for Operation that is subject to enforcement action. The failure to perform a surveillance within the provisions of Specification 4.0.B is a violation of a Technical Specification requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plant's Technical Specifications.

If the allowable outage time limits of the ACTION requirements are less than 24 hours or a shutdown is required to comply with ACTION requirements (e.g., in Specification 3.0.C), a 24-hour allowance is provided to permit a delay in implementing the ACTION requirements. This provides an adequate time limit to complete Surveillance Requirements that have not been performed. The purpose of this allowance is to permit the completion of a surveillance before a shutdown would be required to comply with ACTION requirements or before other remedial measures would be required that may preclude the completion of a surveillance. The basis for this allowance includes consideration for plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in completing the required surveillance. This provision also provides a time limit for the completion of Surveillance Requirements that become applicable as a consequence of MODE changes imposed by ACTION requirements and for completing Surveillance Requirements that are applicable when an exception to the requirements of Specification 4.0.D is allowed. If a surveillance is not completed within the 24-hour allowance, the time limits of the ACTION requirements are applicable at that time. When a surveillance is performed within the 24-hour allowance and the Surveillance Requirements are not met, the time limits of the ACTION requirements are applicable at the time that the surveillance is terminated.

Surveillance Requirements do not have to be performed on inoperable equipment because the ACTION requirements define the remedial measures that apply. However, the Surveillance Requirements have to be met to demonstrate that inoperable equipment has been restored to OPERABLE status.

Specification 4.0.D establishes the requirement that all applicable surveillances must be met before entry into an OPERATIONAL MODE or other condition of operation specified in the Applicability statement. The purpose of this specification is to ensure that system and component OPERABILITY requirements or parameter limits are met before entry into an OPERATIONAL MODE or other specified condition for which these systems and components ensure safe operation of the

BASES

facility. This provision applies to changes in OPERATIONAL MODE(s) or other specified conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable Surveillance Requirements must be performed within the specified surveillance interval to assure that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with ACTION statements, the provisions of Specification 4.0.D do not apply because this would delay placing the facility in a lower MODE of operation.

Specification 4.0.E establishes the requirement that inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a. These requirements apply except when relief has been provided in writing by the Commission.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout the Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. The requirements of Specification 4.0.D to perform surveillance requirements before entry into an OPERATIONAL MODE or other specified condition takes precedence over the ASME Boiler and Pressure Vessel Code provision that allows pumps and valves to be tested up to one week after return to normal operation. The Technical Specification definition of OPERABLE does not allow a grace period before a component, which is not capable of performing its specified function, is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision that allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 131 TO FACILITY OPERATING LICENSE NO. DPR-19,
AMENDMENT NO. 125 TO FACILITY OPERATING LICENSE NO. DPR-25,
AMENDMENT NO. 152 TO FACILITY OPERATING LICENSE NO. DPR-29,
AND AMENDMENT NO. 148 TO FACILITY OPERATING LICENSE NO. DPR-30

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC 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 July 29, 1992, as supplemented January 14, 1993, and February 16, 1993, Commonwealth Edison Company (ComEd, the licensee) submitted an amendment request to upgrade Sections 1.0, 3.0/4.0, and 3/4.3 of the Dresden Nuclear Power Station, Units 2 and 3, and the Quad Cities Nuclear Power Station, Units 1 and 2, Technical Specifications (TS). The changes have been requested as part of their Technical Specification Upgrade Program (TSUP). The staff evaluation of Section 3/4.3 will be forwarded under a separate cover.

As a result of findings by a Diagnostic Evaluation Team inspection performed by the NRC staff at the Dresden Nuclear Power Station in 1987, ComEd made a decision that both the Dresden Nuclear Power Station and sister site Quad Cities Nuclear Power Station, need attention focused on the existing custom TS being used at both sites.

ComEd made the decision to initiate a TSUP for both Dresden and Quad Cities. ComEd evaluated the TSs for both stations against the NRC accepted Standard Technical Specifications (STS) contained in, NUREG-0123 "Standard Technical Specification General Electric Plants, BWR/4". ComEd's evaluation identified numerous potential improvements such as clarifying requirements, changing the TS to make them more understandable to eliminate interpretation, and deleting requirements that are no longer considered current with industry practice. As a result of the evaluation, ComEd has elected to upgrade both the Dresden and Quad Cities TS to the STS contained in NUREG-0123.

The STS contained in NUREG-0123 were developed by the NRC and industry because of the shortcomings associated with the custom TS that were issued to plants licensed in the early 1970's (i.e., Dresden (1971) and Quad Cities (1972)). The STS developed by the NRC and industry provided an adequate level of protection for plant operation by assuring required systems are operable and have been proven to be able to perform their intended functions. The limiting conditions for operation (LCO), the allowed out-of-service times, and the required surveillance frequencies were developed based on industry operating experience, equipment performance, and probabilistic risk assessment analysis during the 1970's. The STS were used as the licensing basis for plants licensed starting in the late 1970's.

For the most part, ComEd's adoption of the STS resulted in more restrictive LCOs and surveillance requirements (SR). In some cases, however, the STSs provide relief from the Dresden and Quad Cities current TS requirements. In all these cases, the adoption of the STS requirements for LCOs or SRs does not change the current licensing basis of either plant as it is described in the Updated Final Safety Analysis Report (UFSAR). In addition, the success criteria for the availability and operability of all required systems contained in the current TS are maintained by the adoption of the STS requirements.

In addition to ComEd adopting the STS guideline and requirements in the TSUP, ComEd has also evaluated GLs concerning line item improvements for TS. These GLs were factored into TSUP to make the proposed TS in the TSUP reflect industry lessons learned in the 1980's and early 1990's and make the proposed TS adhere more closely to the NRC requirements. Some examples of this were the adoption of the requirements of GL 87-09 that clarified LCO's and SRs contained in STS and GL 93-05 and 94-01, that eliminated the requirement to perform unnecessary SRs contained in the STS which were rendering safety systems less reliable.

The TSUP for Dresden and Quad Cities is not a complete adaptation of the STS. The TSUP focuses on (1) the integration of additional information such as equipment operability requirements during shutdown conditions, (2) clarification of requirements such as LCOs and action statements utilizing STS terminology, (3) deletion of superseded requirements and modifications to the TS based on the licensee's responses to Generic Letters (GL), and (4) relocation of specific items to more appropriate TS locations.

The review guidance to be used by the NRC staff in the review of the TSUP is described in Section 2 of this Safety Evaluation (SE). In the staff's review of the proposed amendments each change is evaluated and all deviations between the proposed TS and the STS are justified in the attachments to this SE. In no case did the licensee propose a relaxation of the licensing basis as stated in the UFSARs for Dresden or Quad Cities.

In response to the staff's recommendations, the licensee standardized the Quad Cities and Dresden TS. The TS are identical except for equipment and plant

design differences. Technical differences between the units are identified as appropriate in the amendment package.

2.0 EVALUATION

Review Guidelines - The licensees' purpose for the TSUP was to reformat the existing Dresden and Quad Cities TS into the easier to use STS guidelines. Plant specific data, values, parameters, and equipment specific operational requirements contained in the current TS for Dresden and Quad Cities were retained by the licensee in the TSUP. The staff has accepted this approach. All changes to the current TS and deviations between the licensees' proposed TS and the STS were reviewed by the staff for acceptability to determine if adequate justification was provided (i.e., plant specific features, retention of existing operating values, etc.).

Administrative Changes - Non-technical, administrative changes were intended to incorporate human factor principles into the form and structure of the STS so that they would be easier for plant operation's personnel to use. These changes are editorial in nature or involve the reorganization or reformatting of requirements without affecting technical content of the current TS or operational requirements. Every section of the proposed TS reflects this type of change.

More Restrictive Requirements - The proposed TSs include certain more restrictive requirements than those contained in the existing TS (i.e., they are more conservative than corresponding requirements in the existing TS or are additional restrictions which are contained in NUREG-0123, but are not contained in the existing TS). Examples of more restrictive requirements include the following: placing an LCO on plant equipment that is not required by the present TS to be operable; adding more restrictive requirements to restore inoperable equipment; and adding more restrictive SRs.

Less Restrictive Requirements - Less restrictive requirements are justified on a case-by-case basis as discussed in this SE. When requirements have been shown to provide little or no safety benefit, their removal from the TS may be appropriate. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of (a) generic NRC actions, and (b) new NRC staff positions that have evolved from technological advancements and operating experience. The Dresden and Quad Cities plant design was reviewed to determine if the specific design basis was consistent with the STS contained in NUREG-0123.

Evaluation Format - The evaluation of Sections 1.0 and 3.0/4.0 has been formatted in the following manner. A table was developed for each TS Section. The tables are provided as Attachment I to this SE. The tables compare each step of the licensees' proposed TS with the STS. It should be noted that the tables refer only to step numbers. The specific content of each step (line item) can be obtained by referring to the licensees' July 29, 1992, submittal. Deviations from the STS are identified in the Deviation/Rationale column. Where more than a brief explanation is required, the reader is referred to a

paragraph number in Attachment 2. Where no technical deviation exists between a statement in the STS and the licensee's submittal, the word NONE appears under Deviation/Rationale.

Deviations the staff finds acceptable include: (1) the addition of clarifying statements, (2) incorporating changes based on GLs, (3) reformatting multiple steps included under STS action statements into single steps with unique identifiers, (4) retaining plant specific steps, parameters, or values, (5) moving ACTION statements within a TS, (6) moving ACTION statements from an existing TS to form a new TS, and (7) omitting the inclusion of STS steps that are not in existing TS.

2.1 Table 1.1, Section 1.0, Definitions

Table 1.1 of Attachment 1 lists the terms in Section 1.0, "Definitions," for the NRC STS and compares them to the terms proposed for Section 1.0, "Definitions," of the Dresden and Quad Cities TS. The deviations identified between the STS and the licensee's submittal were either due to plant specific equipment and instrumentation or because the terms are not currently used in the licensee's TS. The staff finds this acceptable.

Tables 1-1 and 1-2 of Section 1.0, "Definitions," were also reviewed. One deviation was found in Table 1-1. The licensee uses the abbreviation E and the term sesquiannual instead of abbreviation R and the term refueling outage as used in the STS. Since both terms identify the same time interval, approximately eighteen months, the staff finds this equivalent acceptable.

Three deviations were found in Table 1-2. The licensee references TS 3.10.I and Special Test Exceptions 3.12.A and 3.12.B. Special test exceptions 3.12.A and 3.12.B were not submitted with this package, but were received by letter dated September 15, 1992. Technical Specification 3.10.I was submitted by letter dated February 16, 1993. The contents of TS 3.12.A, 3.12.B, and 3.10.I will be reviewed in a future amendment in the TSUP which deals with that specific section. The staff has reviewed this section, including each of the above deviations and finds the proposed TS acceptable.

2.2 Table 1.2, 3/4.0 Limiting Condition for Operation; Dresden and Quad Cities

One deviation was identified between the Dresden and Quad Cities LCO and the STS.

The deviation (3.0.C) represents the retention of an existing plant specification. The licensee retained its requirement that stated when an LCO is not met, except as provided in the associated ACTION requirements, the plant has to be in hot shutdown in 12 hours and cold shutdown within the subsequent 24 hours. The STS states that a plant shall be in startup within 6 hours, hot shutdown in the following 6 hours and cold shutdown within the subsequent 24 hours. Since this is a retention of existing requirements and

the licensee has met the intent of the STS, which is to be in hot shutdown within 12 hours, the staff finds this deviation acceptable.

As indicated above, the licensee has incorporated TS line item improvements contained in GLs into the TSUP. These line item improvements were factored into TSUP to make the proposed TS reflect industry lessons learned in the 1980's and 1990's and make the proposed TSs adhere more closely to NRC requirements. Below is a discussion of the incorporation of the line item improvements from in the TS.

On June 4, 1987, the NRC staff issued GL 87-09 which addresses three specific problems encountered by licensees regarding the applicability of LCOs and SRs in Sections 3.0 and 4.0 of the STS. One of the problems addressed by GL 87-09 revised STS 3.0.4 (proposed TSUP 3.0.D) by defining when the provisions of 3.0.4 apply (i.e., when the affected ACTION statements permit continued operation for an unlimited period of time, instead of defining when the provisions of 3.0.4 do not apply).

Generic Letter 87-09 recognizes, in part, that Specification 3.0.4 unduly restricts facility operation when conformance with the ACTION requirements provide an acceptable level of safety for continued operation in any mode. For an LCO that has ACTION requirements permitting continued operation for an unlimited period of time, entry into an operation mode or other specified condition of operation mode should be permitted in accordance with those ACTION requirements. The restriction on changes in the operations mode or other specified conditions should apply only when the ACTION requirements establish a specified time interval in which the LCO must be met or shutdown of the facility would be required, or where entry into that operational mode would result in entry into an ACTION statement with such time constraints. However, the staff position stated in GL 87-09 should not be interpreted as endorsing or encouraging plant startup with inoperable equipment. Generic Letter 87-09 states explicitly that startup with inoperable equipment should be the exception rather than the rule.

Based on our review of the licensee's proposal, we conclude in granting the exceptions to STS 3.0.4. (3.0.D) proposed by the licensee in response to GL 87-09 that: (1) the remedial measures prescribed by the ACTION statement for each change involving the applicability of the Specification 3.0.4 (TSUP 3.0.D) exception should provide a sufficient level of protection to permit operational mode changes and safe long-term operation consistent with the plant's UFSAR; and (2) the licensee will establish adequate administrative controls and procedures which will ensure that startup of the plant with important safety features inoperable will be an infrequent occurrence. Because no changes are proposed that affect plant configuration, setpoints, operating parameters, or the operator/equipment interface, the NRC staff, therefore, finds the proposed changes acceptable.

Generic Letter 89-14: On August 21, 1989, the NRC staff issued GL 89-14 which removed the 3.25 limit from STS 4.0.2 (4.0.B in TSUP). The staff concluded in GL 89-14 that the removal of the 3.25 limit results in a greater benefit to

safety than limiting the use of the 25 percent allowance to extend the surveillance intervals. The licensee's proposed TS 4.0.B is consistent with GL 89-14. Therefore, the staff finds proposed TS 4.0.B to be acceptable.

The licensee proposed a statement be included in TS Section 4.0.E.6 stating that the inservice inspection program for piping identified in NRC GL 88-01 shall be performed in accordance with the NRC staff positions on schedule, methods, personnel, and sample expansion included in GL 88-01 or in accordance with alternate measures approved by the NRC staff. Since ComEd proposed a statement under the Inservice Inspection SRs of the TS Section (4.0.E) that is consistent to the TS requirements approved by the NRC staff for LaSalle County on October 25, 1991, and consistent to the guidance contained in the staff's SE for GL 88-01 issued on August 21, 1990, for Quad Cities and August 23, 1990, for Dresden Station, the staff finds the proposed change acceptable.

Based on the above, the staff finds the TSUP proposed TS for section 3.0/4.0 to be acceptable.

2.3. Bases

The staff has reviewed the proposed bases to the TSUP TS. The licensee has adopted the bases in accordance with the STS content and guidelines. Therefore the staff finds the proposed bases acceptable.

3.0 SUMMARY

The licensee's TS will be clearer and easier to use as a result of the adaptation of the STS format and the changes that resulted in additional limitations, restrictions, or changes based on generic guidance. It is the staff's assessment that the changes proposed in this amendment do not pose any decrease in safety, or an increase in the probability of an analyzed or unanalyzed accident. The revised TS changes do not reduce the existing margin of safety set forth by the current TS or as stated in the UFSAR. Therefore, the staff considers the proposed TS changes to Sections 1.0 and 3/4.0 acceptable.

4.0 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.

5.0 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 effluent 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 (58 FR 34071). 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.

6.0 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.

Attachment 1: Tables of Comparisons
Attachment 2: Additional Information

Principal Contributors: D. Smith
J. Stang

Date: February 16, 1995

**TABLE 1.1 (continued)
DEFINITIONS**

STANDARD TECH SPEC TERMS	DRESDEN	QUAD CITIES	DEVIATION/ RATIONALE*
Logic System Functional Test			None
Max Fraction of Limiting Power Density	Omitted		Not used by fuel vendor Dresden
			None Quad Cities
Member of the Public	Omitted	Omitted	Term not used in proposed TS
Minimum Critical Power Ratio			None
Off-gas Treatment	Omitted	Omitted	Not in current TS
Offsite Dose Calculation Manual			Per GL 89-01
Operable-Operability			None
	Operational Mode	Operational Mode	Retained
Operational Condition	Omitted	Omitted	Retained Operational Mode
Physics Tests			None
Pressure Boundary Leakage			None
Primary Containment Integrity			Per GL 91-08
Process Control Program			Per GL 89-01
Purge - Purging	Omitted	Omitted	Not in current TS
Rated Thermal Power			None
Reactor Protection System Response Time	(4)	(4)	(4)
	Reportable Event	Reportable Event	Retained
Reportable Occurrence	Omitted	Omitted	Retained Reportable Event
Rod Density	Omitted		Not Applicable to Dresden None Quad Cities

*NUMBERS IN PARENTHESES CORRESPOND TO PARAGRAPHS IN ATTACHMENT 2 PROVIDING ADDITIONAL INFORMATION.

TABLE 1.1 (continued)

DEFINITIONS

STANDARD TECH SPEC TERMS

DRESDEN

QUAD CITIES

DEVIATION/
RATIONALE*

Secondary Containment Integrity			None
Shutdown Margin			None
Site Boundry	Omitted	Omitted	Not in current TS
Solidification	Omitted	Omitted	Per GL 89-01
Source Check			None
Staggered Test Basis	Omitted	Omitted	Not in current TS
Thermal Power	Steady State Linear Heat Generation Rate		Retained
Total Peaking Factor	Omitted	Omitted	None
Turbine Bypass System Response Time	Omitted	Omitted	Not used by fuel vendors
	Transient Linear Heat Generation Rate		Not Applicable
	Trip System	Trip System	Retained
Unidentified Leakage			Retained
Unrestricted Area	Omitted	Omitted	None
Vent. Exhaust Treatment System	Omitted	Omitted	Not in current TS
Venting	Omitted	Omitted	Per GL 89-01
Table 1.1 Surveillance Frequency Notation	Omitted	Omitted	Not in current TS
Table 1.2 Operational Modes	8. Sesquiannual E	8. Sesquiannual E	STS Uses Abb. R ComEd Uses Abb. E
	References TS 3.10.I and Special Test Exceptions 3.12.A and 3.12.B	References TS 3.10.I and Special Test Exceptions 3.12.A and 3.12.B	None

*NUMBERS IN PARENTHESES CORRESPOND TO PARAGRAPHS IN ATTACHMENT 2 PROVIDING ADDITIONAL INFORMATION.

TABLE 1.2

LIMITING CONDITIONS FOR OPERATION

STANDARD TS SECTION	(PROPOSED) DRESDEN SECTION	(PROPOSED) QUAD SECTION	DEVIATION/RATIONALE*
3/4.0 LIMITING CONDITION FOR OPERATION			
3.0.1	3.0.A	3.0.A	NONE
3.0.2	3.0.B	3.0.B	NONE
3.0.3	3.0.C	3.0.C	RETENTION OF EXISTING SPEC.
3.0.4	3.0.D	3.0.D	INCORPORATION OF GL 87-09 (1)
4.0.1	4.0.A	4.0.A	NONE
4.0.2.a	4.0.B	4.0.B	NONE
4.0.2.b	4.0.B	4.0.B	INCORPORATION OF GL 89-14 (2)
4.0.3	4.0.C	4.0.C	INCORPORATION OF GL 87-09 (1)
4.0.4	4.0.D	4.0.D	INCORPORATION OF GL 87-07 (1)
4.0.5	4.0.E	4.0 E	NONE
4.0.5.a	4.0.E.1	4.0.E.1	NONE
4.0.5.b	4.0.E.2	4.0.E.2	NONE
4.0.5.c	4.0.E.3	4.0.E.3	NONE
4.0.5.d	4.0.E.4	4.0.E.4	NONE
4.0.5.e	4.0.E.5	4.0.E.5	NONE
	4.0.E.6	4.0.E.6	INCORPORATION OF GL 88-01 (3)

*NUMBERS IN PARENTHESES CORRESPOND TO PARAGRAPHS IN ATTACHMENT 2 PROVIDING ADDITIONAL INFORMATION.

ADDITIONAL INFORMATION

Paragraph
Number

1

STS 3/4.0

Commonwealth Edison Company (ComEd, the licensee) stated that several modifications were proposed as a result of Generic Letter (GL) 87-09. As proposed in GL 87-09, Technical Specification (TS) 3.0.D would provide for entry into applicable operational modes under the provisions of an ACTION statement if the ACTION statement does not "require a shutdown." Enclosure 1 of GL 87-09 clarified that the "shutdown" referred to for Standard Technical Specification (STS) 3.0.4 meant placing the plant in "a mode or condition of operation in which the LCO does not apply."

Dresden and Quad Cities have proposed to incorporate this clarification directly into the TS and its Bases. The term shutdown, as used in GL 87-09 proposed STS 3.0.4, could be interpreted in many ways; e.g., reduced power, leave power operation, enter Mode 4 (Cold Shutdown), exit Mode 1-3 (since these are normally the operating modes), or exit the applicable modes for that TS.

2

STS 4.0.2

The licensee incorporated the line item improvement in GL 89-14 which allows the removal of the 3.25 limit on consecutive surveillance interval extensions. The Bases were also modified to reflect the GL line item improvement.

3

PROPOSED 4.0.E.6

The licensee implemented their commitment to GL 88-01 in Section 4.0.6.E of the proposed TS.

4

STS 1.0

During the staff's review of TSUP Section 1.0 it was noted that the licensee did not incorporate the STS definition for Reactor Protection System (RPS) response time testing. In subsequent discussions with the licensee, the licensee committed to resolve the staff's concern in a future TSUP application.