Docket File

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

December 19, 1995

50-237
50-249

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 RELATED TO TSUP SECTION 3/4.8
(TAC NOS. M90409, M90410, M90411 AND M90412)

Dear Mr. Farrar:

The Commission has issued the enclosed Amendment No. 144 to Facility Operating License No. DPR-19 and Amendment No. 138 to Facility Operating License No. DPR-25 for the Dresden Nuclear Power Station, Units 2 and 3, respectively; and Amendment No. 166 to Facility Operating License No. DPR-29 and Amendment No. 162 to Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2, respectively. The amendments are in response to your application dated September 10, 1993, as supplemented by letter dated June 16, 1995.

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, the licensee) made a decision that both the Dresden Nuclear Power Station and sister site Quad Cities Nuclear Power Station, needed attention focused on the existing custom Technical Specifications (TS) being used at both sites.

The licensee made the decision to initiate a Technical Specification Upgrade Program (TSUP) for both Dresden and Quad Cities. The licensee evaluated the current TS (CTS) for both Dresden and Quad Cities against the Standard Technical Specifications (STS) contained in NUREG-0123, "Standard Technical Specification General Electric Plants BWR/4." The licensee's evaluation identified numerous potential improvements such as clarifying requirements, changing the TS to make them more understandable and 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 adoption of the STS. The TSUP focuses on (1) integrating additional information such as equipment operability requirements during shutdown conditions, (2) clarifying requirements such as limiting conditions for operations and action statements utilizing STS terminology, (3) deleting superseded requirements and

CP1

FO1

modifications to the TS based on the licensee's responses to Generic Letters (GL), and (4) relocating specific items to more appropriate TS locations.

The application dated September 10, 1993, as supplemented June 16, 1995, contains the proposed upgrade of Section 3.8 (Plant Systems) of the Dresden and Quad Cities TS.

The review guidance to be used by the NRC staff in the review of the TSUP is described in Section 2.0 of the enclosed Safety Evaluation (SE). The staff reviewed the proposed changes and evaluated all deviations and changes between the proposed TS, the STS, and the CTS.

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 June 30, 1996, for Dresden and Quad Cities.

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. 144 to DPR-19
2. Amendment No. 138 to DPR-25
3. Amendment No. 166 to DPR-29
4. Amendment No. 162 to DPR-30
5. Safety Evaluation

cc w/encls: see next page *See previous concurrence

DOCUMENT NAME: DRESDEN\DRQ90409.AMD

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

OFFICE	LA:PD3-2	C	PM:PD3-2		PM:PD3-2	E	PM:PD3-2	E	BC:PERB	
NAME	CMoore		DSkay		JStang		RPulsifer for		*CMiller	
DATE	12/6/95		11/ /95		12/6/95		12/8/95		11/29/95	

OFFICE	BC:SPLB		OGC NLW		D:PD3-2	C	DISTRIBUTION:	G. Hill (8)	OGC
NAME	*CMcCracken		MZobler		RCapra		Docket Files	J. Stang	ACRS
DATE	11/20/95		12/7 /95		12/8 /95		PUBLIC	R. Pulsifer	C. Grimes
							PDIII-2 r/f (2)	R. Capra	J. Roe
							D. Skay	C. Moore (2)	C. McCracken
							C. Miller	P. Hiland, RIII	

OFFICIAL RECORD COPY

modifications to the TS based on the licensee's responses to Generic Letters (GL), and (4) relocating specific items to more appropriate TS locations.

The application dated September 10, 1993, as supplemented June 16, 1995, contains the proposed upgrade of Section 3.8 (Plant Systems) of the Dresden and Quad Cities TS.

The review guidance to be used by the NRC staff in the review of the TSUP is described in Section 2.0 of the enclosed Safety Evaluation (SE). The staff reviewed the proposed changes and evaluated all deviations and changes between the proposed TS, the STS, and the CTS.

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 June 30, 1996, for Dresden and Quad Cities.

The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

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. 144 to DPR-19
2. Amendment No. 138 to DPR-25
3. Amendment No. 166 to DPR-29
4. Amendment No. 162 to DPR-30
5. Safety Evaluation

cc w/encls: see next page

cc:

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

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

Mr. J. Heffley
Station Manager
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

Richard J. Singer
Manager - Nuclear
MidAmerican Energy Company
907 Walnut Street
P.O. Box 657
Des Moines, Iowa 50303

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

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

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

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

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

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

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-237

DRESDEN NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 144
License No. DPR-19

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by the Commonwealth Edison Company (the licensee) dated September 10, 1993, as supplemented by letter dated June 16, 1995, 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.

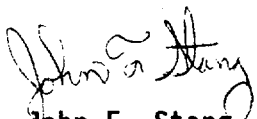
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-19 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 144, 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 June 30, 1996.

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: December 19, 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. 138
License No. DPR-25

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by the Commonwealth Edison Company (the licensee) dated September 10, 1993, as supplemented by letter dated June 16, 1995, 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. 138 , 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 June 30, 1996.

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: December 19, 1995

ATTACHMENT TO LICENSE AMENDMENT NOS. 144 AND 138

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

DOCKET NOS. 50-237 AND 50-249

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number.

UNIT 2 REMOVE	UNIT 3 REMOVE	INSERT
3/4.8-1	3/4.8-1	3/4.8.1
3/4.8-2	3/4.8-2	3/4.8.2
3/4.8-3	3/4.8-3	3/4.8.3
3/4.8-4	3/4.8-4	3/4.8-4
3/4.8-5	3/4.8-5	3/4.8-5
3/4.8-6	3/4.8-6	3/4.8-6
3/4.8-7	3/4.8-7	3/4.8-7
3/4.8-8	3/4.8-8	3/4.8-8
3/4.8-9	3/4.8-9	3/4.8-9
3/4.8-10	3/4.8-10	3/4.8-10
3/4.8-11	3/4.8-11	3/4.8-12
3/4.8-12	3/4.8-12	3/4.8-12
3/4.8-13	3/4.8-13	3/4.8-13
3/4.8-14	3/4.8-14	3/4.8-14
3/4.8-15	3/4.8-15	3/4.8-15
3/4.8-16	3/4.8-16	3/4.8-16
3/4.8-17	3/4.8-17	3/4.8-17
3/4.8-18	3/4.8-18	3/4.8-18
3/4.8-19	3/4.8-19	3/4.8-19
3/4.8-20	3/4.8-20	3/4.8-20
3/4.8-21	3/4.8-21	3/4.8-21
3/4.8-22	3/4.8-22	3/4.8-22
3/4.8-23	3/4.8-23	3/4.8-23
3/4.8-24	3/4.8-24	3/4.8-24
3/4.8-25	3/4.8-25	---
3/4.8-26	3/4.8-26	---
3/4.8-27	3/4.8-27	---
3/4.8-28	3/4.8-28	---
3/4.8-29	3/4.8-29	---
3/4.8-30	3/4.8-30	---
3/4.8-31	3/4.8-31	---
B 3/4.8-32	B 3/4.8-32	B 3/4.8-1
B 3/4.8-33	B 3/4.8-33	B 3/4.8-2
B 3/4.8-34	B 3/4.8-34	B 3/4.8-3
B 3/4.8-35	B 3/4.8-35	B 3/4.8-4
B 3/4.8-36	B 3/4.8-36	---
B 3/4.8-37	B 3/4.8-37	---
B 3/4.8-38	B 3/4.8-38	---
B 3/4.8-39	B 3/4.8-39	---
B 3/4.8-40	B 3/4.8-40	---
B 3/4.8-41	B 3/4.8-41	---

3.8 - LIMITING CONDITIONS FOR OPERATION

A. Containment Cooling Service Water System

At least the following independent containment cooling service water (CCSW) subsystems, with each subsystem comprised of:

1. Two OPERABLE CCSW pumps, and
2. An OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring the water:
   a. Through one LPCI heat exchanger[a], and separately,
   b. To the associated safety related equipment,

shall be OPERABLE:

1. In OPERATIONAL MODE(s) 1, 2 and 3, two subsystems.
2. In OPERATIONAL MODE(s) 4, 5 and *, the subsystem(s) associated with subsystems/loops and components required OPERABLE by Specification 3.8.D.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3, 4, 5 and *.

4.8 - SURVEILLANCE REQUIREMENTS

A. Containment Cooling Service Water System

Each of the required CCSW subsystems shall be demonstrated OPERABLE at least once per 31 days by verifying that each valve, manual, power operated or automatic, in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.

---

a The LPCI heat exchanger is not required to support operation of the CREFS.

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

ACTION:

1. In OPERATIONAL MODE 1, 2 or 3:

   a. With one CCSW pump inoperable, restore the inoperable pump to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

   b. With one CCSW pump in each subsystem inoperable, restore at least one inoperable pump to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

   c. With one CCSW subsystem otherwise inoperable, restore the inoperable subsystem to OPERABLE status with at least one OPERABLE pump within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

   d. With both CCSW subsystems otherwise inoperable, restore at least one subsystem to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

3.8 - LIMITING CONDITIONS FOR OPERATION	4.8 - SURVEILLANCE REQUIREMENTS
2. In OPERATIONAL MODE 4, 5 or * with the CCSW subsystem which is associated with the safety related equipment required OPERABLE by Specification 3.8.D inoperable, declare the associated safety related equipment inoperable and take the ACTION required by Specification 3.8.D.	

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

3.8 - LIMITING CONDITIONS FOR OPERATION

B. Diesel Generator Cooling Water System

A diesel generator cooling water (DGCW) subsystem shall be OPERABLE for each required diesel generator with each subsystem comprised of:

1. One OPERABLE DGCW pump, and

2. An OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring the water to the associated diesel generator.

APPLICABILITY:

When the diesel generator is required to be OPERABLE.

ACTION:

With one or more DGCW subsystems inoperable, declare the associated diesel generator inoperable and take the ACTION required by Specifications 3.9.A or 3.9.B, as applicable.

4.8 - SURVEILLANCE REQUIREMENTS

B. Diesel Generator Cooling Water System

Each of the required DGCW subsystems shall be demonstrated OPERABLE:

1. At least once per 31 days by verifying that each valve in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.

2. At least once per 18 months by verifying that each pump starts automatically upon receipt of a start signal for the associated diesel generator.

3.8 - LIMITING CONDITIONS FOR OPERATION

C. Ultimate Heat Sink

The ultimate heat sink shall be OPERABLE with:

1. A minimum water level at or above elevation 500 ft Mean Sea Level, and

2. An average water temperature of ≤95°F.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3, 4, 5 and *.

ACTION:

With the requirements of the above specification not satisfied:

1. In OPERATIONAL MODE(s) 1, 2 or 3, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

2. In OPERATIONAL MODE(s) 4 or 5 declare the diesel generator cooling water system inoperable and take the ACTION required by Specification 3.8.B.

3. In OPERATIONAL MODE *, declare the diesel generator cooling water system inoperable and take the ACTION required by Specification 3.8.B. The provisions of Specification 3.0.C are not applicable.

4.8 - SURVEILLANCE REQUIREMENTS

C. Ultimate Heat Sink

The ultimate heat sink shall be determined OPERABLE at least once per 24 hours by verifying the average water temperature and water level to be within their limits.

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential to drain the reactor vessel.

3.8 - LIMITING CONDITIONS FOR OPERATION

D. Control Room Emergency Filtration System

The control room emergency filtration system shall be OPERABLE.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3, and *.

ACTION:

1. LEFT INTENTIONALLY BLANK

2. In OPERATIONAL MODE *, with the control room emergency filtration system inoperable, suspend CORE ALTERATION(s), handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel.

3. The provisions of Specification 3.0.C are not applicable in OPERATIONAL MODE *.

4.8 - SURVEILLANCE REQUIREMENTS

D. Control Room Emergency Filtration System

The control room emergency filtration system shall be demonstrated OPERABLE:

1. At least once per 12 hours by verifying that the control room air temperature is ≤95°F.

2. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 hours with the heaters operating.

3. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

   a. Verifying that the system satisfies the in-place penetration and bypass leakage testing acceptance criteria of <0.05% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 2000 scfm ±10%.

   b. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

testing criteria of ASTM-D-3803-89, for a methyl iodide penetration of <0.50%, when tested at 30°C and 70% relative humidity; and

c. Verifying a system flow rate of 2000 scfm ±10% during system operation when tested in accordance with ANSI N510-1980.

4. After every # hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of ASTM-D-3803-89, for a methyl iodide penetration of <0.50%, when tested at 30°C and 70% relative humidity.

5. At least once per 18 months by:

a. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is <6 inches water gauge while operating the filter train at a flow rate of 2000 scfm ±10%.

b. Verifying that the filter train starts and isolation dampers close on manual initiation from the control room.

c. Verifying that during the pressurization mode of operation, control room positive pressure is maintained at ≥1/8 inch water gauge relative to adjacent areas during system operation at a flow rate ≤2000 scfm.

LEFT INTENTIONALLY BLANK

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

d. Verifying that the heaters dissipate 12 ±1.2 kw when tested in accordance with ANSI N510-1980. This reading shall include the appropriate correction for variations from 480 volts at the bus.

6. After each complete or partial replacement of an HEPA filter bank by verifying that the HEPA filter bank satisfies the in-place penetration and leakage testing acceptance criteria of <0.05% in accordance with ANSI N510-1980 while operating the system at a flow rate of 2000 scfm ±10%.

7. After each complete or partial replacement of an charcoal adsorber bank by verifying that the charcoal adsorber bank satisfies the in-place penetration and leakage testing acceptance criteria of <0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at flow rate of 2000 scfm ±10%.

3.8 - LIMITING CONDITIONS FOR OPERATION

E. Flood Protection

Flood protection shall be available for all required safe shutdown systems, components and structures.

APPLICABILITY:

At all times.

ACTION:

With the water level, as measured at the Unit 2/3 cribhouse:

1. Above elevation 506.5 ft Mean Sea Level USGS datum, initiate the applicable flood protection measures.

2. Above, or predicted to exceed within 3 days, elevation 509.0 ft Mean Sea Level USGS datum, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN with the following 24 hours.

4.8 - SURVEILLANCE REQUIREMENTS

E. Flood Protection

The water level at the Unit 2/3 cribhouse shall be determined to be within the limit by:

1. Measurement at least once per 24 hours when the water level is below elevation 506.0 ft Mean Sea Level USGS datum, and

2. Measurement at least once per 2 hours when the water level is equal to or above elevation 506.0 ft Mean Sea Level USGS datum.

3.8 - LIMITING CONDITIONS FOR OPERATION

F. Snubbers

All required snubbers shall be OPERABLE. The only snubbers excluded from this requirement are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse impact on any safety-related system.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2 and 3. OPERATIONAL MODE(s) 4 and 5 for snubbers located on systems required OPERABLE in OPERATIONAL MODE(s) 4 and 5.

ACTION:

With one or more snubbers inoperable, on any system, within 72 hours:

1. Replace or restore the inoperable snubber(s) to OPERABLE status, and

2. Perform an engineering evaluation per Specification 4.8.F.7 on the attached component.

Otherwise, declare the attached system inoperable and follow the appropriate ACTION statement for that system.

4.8 - SURVEILLANCE REQUIREMENTS

F. Snubbers

Each snubber shall be demonstrated OPERABLE by the performance of the following augmented inservice inspection program in addition to the requirements of Specification 4.0.E.

1. Inspection Types

As used in this specification, "type of snubber" shall mean snubbers of the same design and manufacturer, irrespective of capacity.

2. Visual Inspections

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table 4.8.F-1. The visual inspection interval for each type of snubber shall be determined based upon the criteria provided in Table 4.8.F-1[(a)].

3. Visual Inspection Acceptance Criteria

Visual inspections shall verify that: (1) the snubber has no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are functional, and (3) fasteners for the attachment of the snubber to the component and to the snubber anchorage are functional. Snubbers which appear inoperable as a result of

---

a The first inspection interval determined using this criteria shall be based upon the previous inspection interval as established by the requirements in effect before amendment nos 144 & 138.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

visual inspections shall be classified as unacceptable. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the ACTION requirements shall be met.

Snubbers originally classified as unacceptable may be reclassified as acceptable for the purpose of establishing the next visual inspection interval, provided that: (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers irrespective of type that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specification 4.8.F.6.

4. Transient Event Inspection

An inspection shall be performed of all snubbers attached to sections of systems that have experienced unexpected, potentially damaging transients, as determined from a review of operational data or a visual inspection of the systems, within 72 hours for accessible systems and 6 months for inaccessible systems following this determination. In addition to satisfying the visual inspection acceptance criteria, freedom-of-motion of mechanical snubbers shall be verified using at least one of the following: (1) manually induced snubber movement; or (2) evaluation of in-place snubber piston setting; or (3) stroking the mechanical snubber through its full range of travel.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

5. Functional Tests

At least once per 18 months, a representative sample of snubbers shall be tested using one of the following sample plans for each type of snubber. The sample plan shall be selected prior to the test period and cannot be changed during the test period. The NRC Regional Administrator shall be notified in writing of the sample plan selected prior to the test period or the sample plan used in the prior test period shall be implemented:

a. At least 10% of the total of each type of snubber shall be functionally tested either in-place or in a bench test. For each snubber of a type that does not meet the functional test acceptance criteria of Specification 4.8.F.6, an additional 10% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested; or

b. A representative sample of each type of snubber shall be functionally tested, in accordance with Figure 4.8.F-1. "C" is the total number of snubbers of a type found not meeting the acceptance requirements of Specification 4.8.F.6. The cumulative number of snubbers of a type tested is denoted by "N". At the end of each day's testing, the new values of "N" and "C" (previous day's total plus current day's increments) shall be plotted on Figure 4.8.F-1.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

If at any time the point plotted falls on or above the "Reject" line, all snubbers of that type shall be functionally tested. If at any time the point plotted falls on or below the "Accept" line, testing of snubbers of that type may be terminated. When the point plotted lies in the "Continue Testing" region, additional snubbers of that type shall be tested until the point falls in the "Accept" region or the "Reject" region, or all the snubbers of that type have been tested. Testing equipment failure during functional testing may invalidate that day's testing and allow that day's testing to resume anew at a later time, providing all snubbers tested with the failed equipment during the day of equipment failure are retested; or

c. An initial representative sample of 55 snubbers of each type shall be functionally tested. For each snubber type which does not meet the functional test acceptance criteria, another sample of at least one-half the size of the initial sample shall be tested until the total number tested is equal to the initial sample size multiplied by the factor, 1 + C/2, where "C" is the number of snubbers found which do not meet the functional test acceptance criteria. The results from this sample plan shall be plotted using an "Accept" line which follows the equation $N = 55(1 + C/2)$. Each snubber point should be plotted as soon as the snubber is tested. If the point plotted falls on or below the

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

"Accept" line, testing of that type of snubber may be terminated. If the point plotted falls above the "Accept" line, testing must continue until the point falls on or below the "Accept" line or all the snubbers of that type have been tested.

The representative sample selected for the functional test sample plans shall be randomly selected from the snubbers of each type and reviewed before beginning the testing. The review shall ensure as far as practical that they are representative of the various configurations, operating environments, range of size, and capacity of snubbers of each type.

Snubbers placed in the same location as snubbers which failed the previous functional test shall be retested at the time of the next functional test but shall not be included in the sample plan, and failure of this functional test shall not be the sole cause for increasing the sample size under the sample plan. If during testing, additional sampling is required due to failure of only one type of snubber, the functional testing results shall be reviewed at the time to determine if additional samples should be limited to the type of snubber which has failed the functional testing.

6. Functional Test Acceptance Criteria

The snubber functional test shall verify that:

a. Activation (restraining action) is achieved within the specified range in both tension and compression;

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

b. The force required to initiate or maintain motion of the snubber is within the specified range in both directions of travel; and

c. For snubbers specifically required not to displace under continuous load, the ability of the snubber to withstand load without displacement.

Testing methods may be used to measure parameters indirectly or parameters other than those specified if those results can be correlated to the specified parameters through established methods.

7. Functional Test Failure Analysis

An engineering evaluation shall be made of each failure to meet the functional test acceptance criteria to determine the cause for the failure. The results of this evaluation shall be used, if applicable, in selecting snubbers to be tested in an effort to determine the OPERABILITY of other snubbers irrespective of type which may be subject to the same failure mode.

For the snubbers found inoperable, an engineering evaluation shall be performed on the components to which the inoperable snubbers are attached. The purpose of this engineering evaluation shall be to determine if the components to which the inoperable snubbers are attached were adversely affected by the inoperability of the snubbers in order to ensure that the component remains capable of meeting the designed service.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

If any snubber selected for functional testing either fails to lock up or fails to move, i.e., frozen-in-place, the cause will be evaluated and, if caused by manufacturer or design deficiency, all snubbers of the same type subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated in Specification 4.8.F.5 for snubbers not meeting the functional test acceptance criteria.

8. Functional Testing of Repaired and Replaced Snubbers

Snubbers which fail the visual inspection or the functional test acceptance criteria shall be repaired or replaced. Replacement snubbers and snubbers which have repairs which might affect the functional test result shall be tested to meet the functional test criteria before installation in the unit. Mechanical snubbers shall have met the acceptance criteria subsequent to their most recent service, and the freedom-of-motion test must have been performed within 12 months before being installed in the unit.

9. Snubber Service Life Program

The service life of all snubbers shall be monitored to ensure that the service life is not exceeded between surveillance inspections. The maximum expected service life for various seals, springs, and other critical parts shall be extended or shortened based on monitored test results and failure history. Critical parts shall be replaced so that the maximum service life will not be exceeded during a period when

3.8 - LIMITING CONDITIONS FOR OPERATION	4.8 - SURVEILLANCE REQUIREMENTS
	the snubber is required to be OPERABLE. The parts replacements shall be documented and the documentation shall be retained in accordance with Specification 6.5.B.

TABLE 4.8.F-1

SNUBBER VISUAL INSPECTION CRITERIA

Population[a][b] or Category	NUMBER OF UNACCEPTABLE SNUBBERS		
	Column A [c][f] Extend Interval	Column B [d][f] Repeat Interval	Column C [e][f] Reduce Interval
1	0	0	1
80	0	0	2
100	0	1	4
150	0	3	8
200	2	5	13
300	5	12	25
400	8	18	36
500	12	24	48
750	20	40	78
≥1000	29	56	109

---

a The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of unacceptable snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, the decision must be made and documented before any inspection and shall be used as the basis upon which to determine the next inspection interval for that category.

b Interpolation between population or category sizes and the number of unacceptable snubbers is permissible. Use next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of unacceptable snubbers as determined by interpolation.

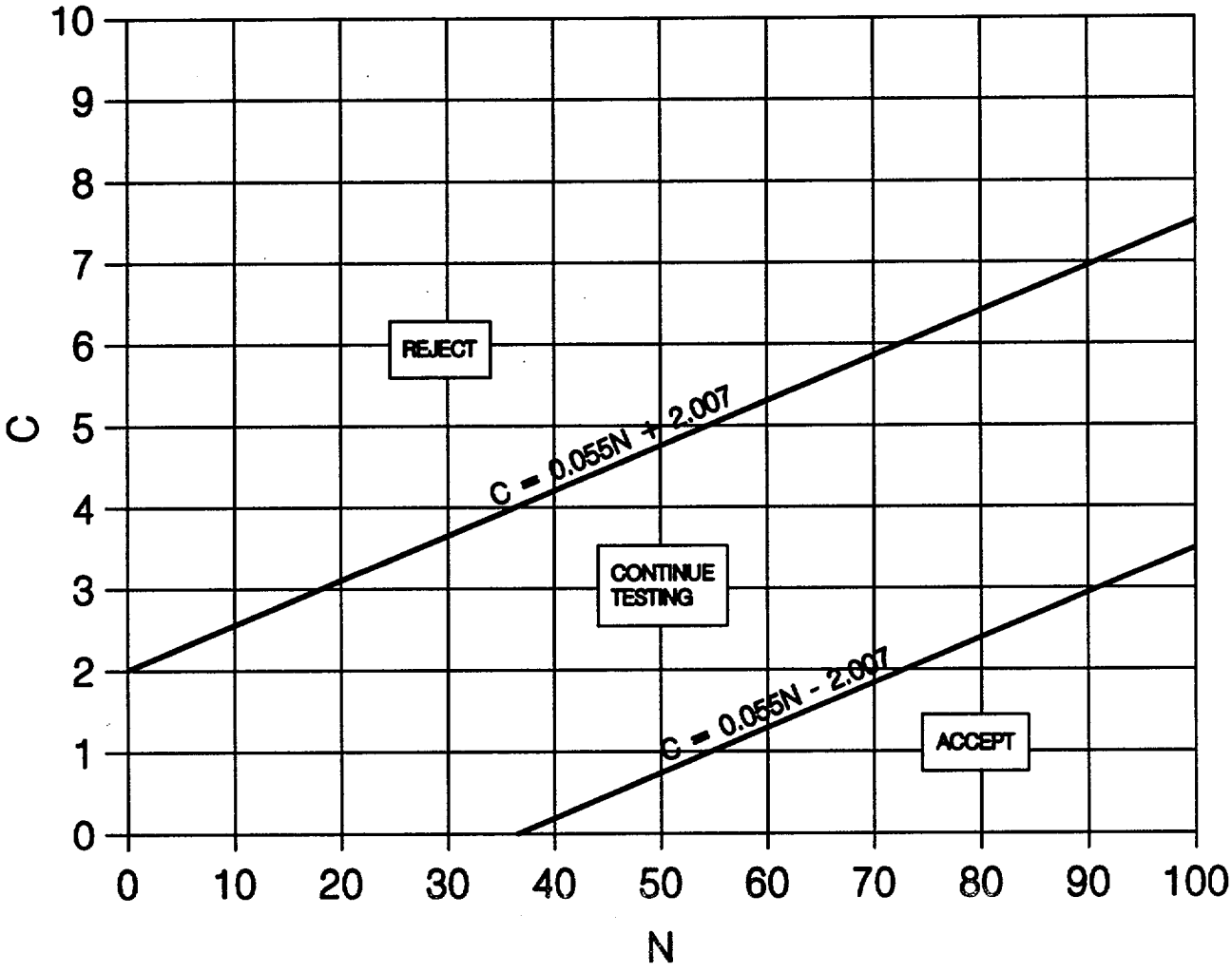
c If the number of unacceptable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval, but not greater than 48 months.

d If the number of unacceptable snubbers is equal to or less than the number in Column B but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.

e If the number of unacceptable snubbers is equal to or greater than the number in Column C, the next inspection interval shall be two-thirds of the previous interval, but not less than 31 days. However, if the number of unacceptable snubbers is less than the number in Column C but greater than the number in Column B, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of unacceptable snubbers found during the previous interval and the number in Column B to the difference in the numbers in Columns B and C.

f The provisions of Specification 4.0.B are applicable for all inspection intervals up to and including 48 months.

FIGURE 4.8.F-1
SAMPLING PLAN FOR SNUBBER FUNCTIONAL TESTING



N = Cumulative number of snubbers of a type tested.

C = Total number of snubbers of a type not meeting acceptance requirements.

3.8 - LIMITING CONDITIONS FOR OPERATION

G. Sealed Source Contamination

Each sealed source containing radioactive material either in excess of 100 μCi of beta and/or gamma emitting material or 5 μCi of alpha emitting material shall be free of $\geq$0.005 μCi of removable contamination.

APPLICABILITY:

At all times.

ACTION:

1. With a sealed source having removable contamination in excess of the above limit, withdraw the sealed source from use and either:

   a. Decontaminate and repair the sealed source, or

   b. Dispose of the sealed source in accordance with Commission Regulations.

2. With a sealed source leakage test revealing the presence of removable contamination in excess of the above limit, a report shall be prepared and submitted to the Commission on an annual basis.

3. The provisions of Specification 3.0.C are not applicable.

4.8 - SURVEILLANCE REQUIREMENTS

G. Sealed Source Contamination

1. Test Requirements - Each sealed source shall be tested for leakage and/or contamination by:

   a. The licensee, or

   b. Other persons specifically authorized by the Commission or an Agreement State.

   The test method shall have a detection sensitivity of at least 0.005 μCi per test sample.

2. Test Frequencies - Each category of sealed sources, excluding startup sources and fission detectors previously subjected to core flux, shall be tested at the frequency described below.

   a. Sources in use - At least once per 6 months for all sealed sources containing radioactive material:

      1) With a half-life >30 days, excluding Hydrogen 3, and

      2) In any form other than gas.

   b. Stored sources not in use - Each sealed source shall be tested prior to use or transfer to another licensee unless tested within the previous 6 months. Sealed sources transferred without a certificate indicating the last test date shall be tested prior to being placed into use.

3.8 - LIMITING CONDITIONS FOR OPERATION	4.8 - SURVEILLANCE REQUIREMENTS
	c. Startup sources and fission detectors - Each sealed startup source and fission detector shall be tested within 31 days prior to being subjected to core flux or installed in the core and following repair or maintenance to the source.

3.8 - LIMITING CONDITIONS FOR OPERATION

H. Offgas Explosive Mixture

The concentration of hydrogen in the offgas holdup system shall be limited to ≤4% by volume.

APPLICABILITY:

During offgas holdup system operation.

ACTION:

With the concentration of hydrogen in the offgas holdup system exceeding the limit, restore the concentration to within the limit within 48 hours. The provisions of Specification 3.0.C are not applicable.

4.8 - SURVEILLANCE REQUIREMENTS

H. Offgas Explosive Mixture

The concentration of hydrogen in the offgas holdup system shall be determined to be within the above limits as required by Table 3.2.H-1 of Specification 3.2.H.

3.8 - LIMITING CONDITIONS FOR OPERATION

I. Main Condenser Offgas Activity

The release rate of the sum of the activities of the noble gases measured prior to the offgas holdup line shall be limited to ≤100 μCi/sec/MWt, after 30 minutes decay.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2[a] and 3[a].

ACTION:

With the release rate of the sum of the activities of the noble gases at the main condenser air ejector effluent (as measured prior to the offgas holdup line) >100 μCi/sec/MWt, after 30 minutes decay, restore the release rate to within its limit within 72 hours or be in at least STARTUP with the main steam isolation valves closed within the next 8 hours.

4.8 - SURVEILLANCE REQUIREMENTS

I. Main Condenser Offgas Activity

1. The release rate of noble gases from the main condenser air ejector shall be continuously monitored in accordance with the ODCM.

2. The release rate of the sum of the activities from noble gases from the main condenser air ejector shall be determined to be within the limits of Specification 3.8.I at the following frequencies[b] by performing an isotopic analysis of a representative sample of gases taken at the recombiner outlet, or the air ejector outlet, if the recombiner is bypassed:

   a. At least once per 31 days, and

   b. Within 4 hours following the determination of an increase, as indicated by the air ejector noble gas monitor, of >50%, after factoring out increases due to changes in THERMAL POWER level, in the nominal steady state fission gas release from the primary coolant.

---

a When the main condenser air ejector is in operation.

b The provisions of Specification 4.0.D are not applicable.

3.8 - LIMITING CONDITIONS FOR OPERATION

J. Liquid Holdup Tanks

The quantity of radioactive material contained in each of the following tanks shall be limited to ≤0.7 curies and the total of all the tanks shall not exceed 3.0 curies.

a. Waste sample tanks,
b. Floor drain sample tanks,
c. Waste surge tank, and
d. Any outside temporary tank used for storage of radioactive liquids.

APPLICABILITY:

At all times.

ACTION:

With the quantity of radioactive material in any of the above identified tanks exceeding the above limit, immediately suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit. The provisions of Specification 3.0.C are not applicable.

4.8 - SURVEILLANCE REQUIREMENTS

J. Liquid Holdup Tanks

The quantity of radioactive material contained in each of the identified tanks shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank and within 7 days of completion of the addition of radioactive materials to the tank.

BASES

3/4.8.A Containment Cooling Service Water System

The containment cooling service water system, with the ultimate heat sink, provides sufficient cooling capacity for continued operation of the containment cooling system and of other safety-related equipment (e.g., CCSW keep-fill, the control room emergency ventilation system refrigeration units), during normal and accident conditions. The redundant cooling capacity of the system, assuming a single failure, is consistent with the assumptions used in the safety analysis to keep the accident conditions within acceptable limits. Since only one of the four pumps is required to provide the necessary cooling capacity, a thirty day repair period is allowed for one pump out of service. OPERABILITY of this system is also dependent upon special measures for protection from flooding in the condenser pit area.

3/4.8.B Diesel Generator Cooling Water System

The diesel generator cooling water system, with the ultimate heat sink, provides sufficient cooling capacity for continued operation of the diesel generators during normal and accident conditions. The cooling capacity of the system is consistent with the assumptions used in the safety analysis to keep the accident conditions within acceptable limits. OPERABILITY of this system is also dependent upon special measures for protection from flooding in the condenser pit area.

3/4.8.C Ultimate Heat Sink

The canals provide an ultimate heat sink with sufficient cooling capacity to either provide normal cooldown of the units, or to mitigate the effects of accident conditions within acceptable limits for one unit while conducting a normal cooldown on the other unit.

3/4.8.D Control Room Emergency Filtration System

The control room emergency filtration system maintains habitable conditions for operations personnel during and following all design basis accident conditions. This system, in conjunction with control room design, is based on limiting the radiation exposure to personnel occupying the room to five rem or less whole body, or its equivalent.

The frequency of tests and sample analysis is necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. The control room emergency filtration system in-place testing procedures are established utilizing applicable sections of ANSI N510-1980 standard. Operation of the system with the heaters OPERABLE for ten hours a month is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The charcoal adsorber efficiency test procedures allow for the removal of one representative sample cartridge and testing in accordance with the guidelines of ASTM-D-3803-89. The sample is at least two inches in diameter and has a length equivalent to the thickness of the bed. If the iodine removal efficiency

test results are unacceptable, all adsorbent in the system is replaced. HEPA filter particulate removal efficiency is verified to be at least 99% by in-place testing with a DOP testing medium.

3/4.8.E Flood Protection

Flood protection measures are provided to protect the systems and equipment necessary for safe shutdown during high water conditions. The equipment necessary to implement the appropriate measures, as detailed in plant procedures, is required to be available, but not necessarily onsite, to implement the procedures in a timely manner. The selected water levels are based on providing timely protection from the design basis flood of the river.

3/4.8.F Snubbers

Mechanical snubbers are provided to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic event or other event initiating dynamic loads. Snubbers are classified and grouped by design, manufacturer and accessibility. A list of individual snubbers with information of snubber location, classification or group, and system affected is maintained at the plant. The accessibility of each snubber is determined and documented for each snubber. The determination is based upon the existing radiation levels and the expected time to perform a visual inspection in each snubber location as well as other factors associated with accessibility during plant operation (e.g., temperature, atmosphere, location, etc.), and the recommendations of Regulatory Guides 8.8 and 8.10.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to the systems. Therefore, the required inspection interval varies with the number of unacceptable snubbers found during the previous inspection, the total population or category size for each snubber type, and the previous inspection interval. A snubber is considered unacceptable if it fails to satisfy the acceptance criteria of the visual inspection. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly as determined and documented prior to the inspections. The categorization is used as the basis for determining the next inspection interval for that category.

If a review and evaluation can not justify continued operation with an unacceptable snubber, the snubber is declared inoperable and the applicable action taken. To determine the next surveillance interval, the unacceptable snubber may be reclassified as acceptable if it can be demonstrated that the snubber is OPERABLE in its as-found condition by the performance of a functional test. The next visual inspection interval may be twice, the same, or reduced by as much as two-thirds of the previous inspection interval, depending on the number of unacceptable snubbers found in proportion to the size of the population or category for each type of snubber included in the previous inspection. The inspection interval may be as long as 48 months and the provisions of Specification 4.0.B may be applied.

When a snubber is found to be inoperable, an engineering evaluation is performed, in addition to the determination of the snubber mode of failure, in order to determine if any safety-related component or system has been adversely affected by the inoperability of the snubber. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

To provide additional assurance of snubber functional reliability , a representative sample of the installed snubbers will be functionally tested at 18 month intervals. This sample is identified using one of three methods:

1. Functionally test 10% of a type of snubber with an additional 10% tested for each functional testing failure, or

2. Functionally test a sample size and determine sample acceptance or rejection using Figure 4.8.F-1, or

3. Functionally test a representative sample size and determine sample acceptance or rejection using the stated equation.

Figure 4.8.F-1 was developed using "Wald's Sequential Probability Ratio Plan" as described in "Quality Control and Industrial Statistics" by Acheson J. Duncan.

Permanent or other exemptions from the surveillance program for individual snubbers may be granted by the NRC if a justifiable basis for exemption is presented and, if applicable, snubber life destructive testing was performed to qualify the snubber for the applicable design conditions at either the completion of their fabrication or at a subsequent date. Snubbers so exempted are listed in the list of individual snubbers indicating the extent of the exemptions.

The service life of a snubber is established via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubbers, seal replace, spring replaced, in high radiation area, in high temperature area, etc.). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records provide statistical bases for future consideration of snubber service life.

3/4.8.G Sealed Source Contamination

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values. Sealed sources, including startup sources and fission detectors, are classified into three groups according to their use, with surveillance requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed

within a shielded mechanism, i.e., sealed sources within radiation monitoring or boron measuring devices, are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

3/4.8.H Explosive Gas Mixture

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the offgas holdup system is maintained below the flammability limits of hydrogen and oxygen. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10CFR Part 50.

3/4.8.I Main Condenser Offgas Activity

Restricting the gross radioactivity rate of noble gases from the main condenser provides reasonable assurance that the total body exposure to an individual at the exclusion area boundary will not exceed a small fraction of the limits of 10CFR Part 100 in the event this effluent is inadvertently discharged directly to the environment without treatment. This specification implements the requirements of General Design Criteria 60 and 64 of Appendix A to 10CFR Part 50.

3/4.8.J Liquid Holdup Tanks

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area. Recirculation of the tank contents for the purpose of reducing the radioactive content is not considered to be an addition of radioactive material to the tank.

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

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 166
License No. DPR-29

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Commonwealth Edison Company (the licensee) dated September 10, 1993, as supplemented by letter dated June 16, 1995, 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. 166 , 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 June 30, 1996.

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: December 19, 1995

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

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 162
License No. DPR-30

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Commonwealth Edison Company (the licensee) dated September 10, 1993, as supplemented by letter dated June 16, 1995, 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. 162 , 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 June 30, 1996.

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: December 19, 1995

ATTACHMENT TO LICENSE AMENDMENT NOS. 166 AND 162

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

DOCKET NOS. 50-254 AND 50-265

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number.

UNIT 1 REMOVE	UNIT 2 REMOVE	INSERT
3.8/4.8-1	3.8/4.8-1	3/4.8.1
3.8/4.8-2	3.8/4.8-2	3/4.8.2
3.8/4.8-3	3.8/4.8-3	3/4.8.3
3.8/4.8-4	3.8/4.8-4	3/4.8-4
3.8/4.8-5	3.8/4.8-5	3/4.8-5
3.8/4.8-6	3.8/4.8-6	3/4.8-6
---	3.8/4.8-6a	---
3.8/4.8-7	3.8/4.8-7	3/4.8-7
---	3.8/4.8-7a	---
3.8/4.8-8	3.8/4.8-8	3/4.8-8
3.8/4.8-9	3.8/4.8-9	3/4.8-9
3.8/4.8-10	3.8/4.8-10	3/4.8-10
3.8/4.8-11	3.8/4.8-11	3/4.8-12
3.8/4.8-12	3.8/4.8-12	3/4.8-12
3.8/4.8-13	3.8/4.8-13	3/4.8-13
3.8/4.8-14	3.8/4.8-14	3/4.8-14
---	3.8/4.8-14a	---
---	3.8/4.8-14b	---
3.8/4.8-15	3.8/4.8-15	3/4.8-15
3.8/4.8-16	3.8/4.8-16	3/4.8-16
3.8/4.8-17	3.8/4.8-17	3/4.8-17
3.8/4.8-18	3.8/4.8-18	3/4.8-18
3.8/4.8-19	3.8/4.8-19	3/4.8-19
3.8/4.8-20	3.8/4.8-20	3/4.8-20
3.8/4.8-21	3.8/4.8-21	3/4.8-21
---	3.8/4.8-21a	---
---	---	3/4.8-22
---	---	3/4.8-23
---	---	3/4.8-24
3.8/4.8-22	3.8/4.8-22	B 3/4.8-1
3.8/4.8-23	3.8/4.8-23	B 3/4.8-2
3.8/4.8-24	3.8/4.8-24	B 3/4.8-3
3.8/4.8-25	3.8/4.8-25	B 3/4.8-4
3.8/4.8-26	3.8/4.8-26	---
3.8/4.8-27	3.8/4.8-27	---
3.8/4.8-28	3.8/4.8-28	---
3.8/4.8-29	3.8/4.8-29	---
---	3.8/4.8-29a	---
3.8/4.8-30	3.8/4/8-30	---
3.8/4.8-31	---	---

UNIT 1 REMOVE CONT.	UNIT 2 REMOVE CONT.	INSERT CONT.
3.8/4.8-32	---	---
3.8/4.8-33	---	---
3.8/4.8-34	---	---
3.8/4.8-35	---	---
3.8/4.8-36	---	---
3.8/4.8-37	---	---
3.8/4.8-38	---	---
Figure 4.8-1	---	---

3.8 - LIMITING CONDITIONS FOR OPERATION

A. Residual Heat Removal Service Water System

At least the following independent residual heat removal service water (RHRSW) subsystems, with each subsystem comprised of:

1. Two OPERABLE RHRSW pumps, and

2. An OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring the water:

   a. Through one RHR heat exchanger, and separately,

   b. To the associated safety related equipment,

shall be OPERABLE:

1. In OPERATIONAL MODE(s) 1, 2 and 3, two subsystems.

2. In OPERATIONAL MODE(s) 4, 5 and * the subsystem(s) associated with subsystems/loops and components required OPERABLE by Specifications 3.6.O, 3.6.P, 3.8.D, 3.10.K and 3.10.L.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3, 4, 5 and *.

4.8 - SURVEILLANCE REQUIREMENTS

A. Residual Heat Removal Service Water System

Each of the required RHRSW subsystems shall be demonstrated OPERABLE at least once per 31 days by verifying that each valve, manual, power operated or automatic, in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.

---

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

3.8 - LIMITING CONDITIONS FOR OPERATION | 4.8 - SURVEILLANCE REQUIREMENTS

ACTION:

1. In OPERATIONAL MODE 1, 2 or 3:

   a. With one RHRSW pump inoperable, restore the inoperable pump to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

   b. With one RHRSW pump in each subsystem inoperable, restore at least one inoperable pump to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

   c. With one RHRSW subsystem otherwise inoperable, restore the inoperable subsystem to OPERABLE status with at least one OPERABLE pump within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

   d. With both RHRSW subsystems otherwise inoperable, restore at least one subsystem to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN[a] within the following 24 hours.

---

a Whenever both RHRSW subsystems are inoperable, if unable to attain COLD SHUTDOWN as required by this ACTION, maintain reactor coolant temperature as low as practical by use of alternate heat removal methods.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

2. In OPERATIONAL MODE 3 or 4 with the RHRSW subsystem which is associated with an RHR subsystem required OPERABLE by Specification 3.6.O or 3.6.P inoperable, declare the associated RHR subsystem inoperable and take the ACTION required by Specification 3.6.O or 3.6.P, as applicable.

3. In OPERATIONAL MODE 5 with the RHRSW subsystem which is associated with an RHR subsystem required OPERABLE by Specification 3.10.K or 3.10.L inoperable, declare the associated RHR subsystem inoperable and take the ACTION required by Specification 3.10.K or 3.10.L, as applicable.

4. In OPERATIONAL MODE * with both unit RHRSW subsystem(s) inoperable, declare the control room emergency filtration system, Train B, inoperable and take the ACTION required by Specification 3.8.D.

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

3.8 - LIMITING CONDITIONS FOR OPERATION

B. Diesel Generator Cooling Water System

A diesel generator cooling water (DGCW) subsystem shall be OPERABLE for each required diesel generator with each subsystem comprised of:

1. One OPERABLE DGCW pump, and

2. An OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring cooling water to the associated diesel generator.

APPLICABILITY:

When the diesel generator is required to be OPERABLE.

ACTION:

With one or more DGCW subsystems inoperable, declare the associated diesel generator inoperable and take the ACTION required by Specifications 3.9.A or 3.9.B, as applicable.

4.8 - SURVEILLANCE REQUIREMENTS

B. Diesel Generator Cooling Water System

Each of the required DGCW subsystems shall be demonstrated OPERABLE:

1. At least once per 31 days by verifying that each valve in the flow path that is not locked, sealed or otherwise secured in position, is in its correct positon.

2. At least once per 18 months by verifying that each pump starts automatically upon receipt of a start signal for the associated diesel generator.

3.8 - LIMITING CONDITIONS FOR OPERATION

C. Ultimate Heat Sink

The ultimate heat sink shall be OPERABLE with:

1. A minimum water level at or above elevation 561 ft Mean Sea Level, and

2. An average water temperature of ≤95°F.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3, 4, 5 and *.

ACTION:

With the requirements of the above specification not satisfied:

1. In OPERATIONAL MODE(s) 1, 2 or 3, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

2. In OPERATIONAL MODE(s) 4 or 5 declare the RHRSW system and the diesel generator cooling water system inoperable and take the ACTION(s) required by Specifications 3.8.A and 3.8.B.

3. In OPERATIONAL MODE *, declare the diesel generator cooling water system inoperable and take the ACTION(s) required by Specification 3.8.B. The provisions of Specification 3.0.C are not applicable.

4.8 - SURVEILLANCE REQUIREMENTS

C. Ultimate Heat Sink

The ultimate heat sink shall be determined OPERABLE at least once per 24 hours by verifying the average water temperature and water level to be within their limits.

---

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

3.8 - LIMITING CONDITIONS FOR OPERATION

D. Control Room Emergency Filtration System

The control room emergency filtration system shall be OPERABLE.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3, and *.

ACTION:

1. LEFT INTENTIONALLY BLANK

2. In OPERATIONAL MODE *, with the control room emergency filtration system inoperable, suspend CORE ALTERATION(s), handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel.

3. The provisions of Specification 3.0.C are not applicable in OPERATIONAL MODE *.

4.8 - SURVEILLANCE REQUIREMENTS

D. Control Room Emergency Filtration System

The control room emergency filtration system shall be demonstrated OPERABLE:

1. At least once per 12 hours by verifying that the control room air temperature is ≤95°F.

2. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 hours with the heaters operating.

3. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

   a. Verifying that the system satisfies the in-place penetration and bypass leakage testing acceptance criteria of <0.05% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 2000 scfm ±10%.

   b. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

testing criteria of ASTM-D-3803-89, for a methyl iodide penetration of <0.50%, when tested at 30°C and 70% relative humidity; and

c. Verifying a system flow rate of 2000 scfm ±10% during system operation when tested in accordance with ANSI N510-1980.

4. After every # hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of ASTM-D-3803-89, for a methyl iodide penetration of <0.50%, when tested at 30°C and 70% relative humidity.

5. At least once per 18 months by:

   a. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is <6 inches water gauge while operating the filter train at a flow rate of 2000 scfm ±10%.

   b. Verifying that the isolation dampers close on each of the following signals:

      1) Manual initiation from the control room, and

      2) Simulated automatic isolation signal.

   c. Verifying that during the pressurization mode of operation, control room positive pressure is maintained at ≥1/8 inch water gauge relative to adjacent areas during system operation at a flow rate ≤2000 scfm.

LEFT INTENTIONALLY BLANK

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

d. Verifying that the heaters dissipate 12 ±1.2 kw when tested in accordance with ANSI N510-1980. This reading shall include the appropriate correction for variations from 480 volts at the bus.

6. After each complete or partial replacement of an HEPA filter bank by verifying that the HEPA filter bank satisfies the in-place penetration and leakage testing acceptance criteria of <0.05% in accordance with ANSI N510-1980 while operating the system at a flow rate of 2000 scfm ±10%.

7. After each complete or partial replacement of an charcoal adsorber bank by verifying that the charcoal adsorber bank satisfies the in-place penetration and leakage testing acceptance criteria of <0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at flow rate of 2000 scfm ±10%.

3.8 - LIMITING CONDITIONS FOR OPERATION

E. Flood Protection

Flood protection shall be available for all required safe shutdown systems, components and structures.

APPLICABILITY:

At all times.

ACTION:

With the water level, as measured at the plant intake bay:

1. Above elevation 586 ft Mean Sea Level USGS datum, initiate the applicable flood protection measures.

2. Above, or predicted to exceed within 3 days, elevation 594 ft Mean Sea Level USGS datum, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

4.8 - SURVEILLANCE REQUIREMENTS

E. Flood Protection

The water level at the plant intake bay shall be determined to be within the limit by:

1. Measurement at least once per 24 hours when the water level is below elevation 585.5 ft Mean Sea Level USGS datum, and

2. Measurement at least once per 2 hours when the water level is equal to or above elevation 585.5 ft Mean Sea Level USGS datum.

3.8 - LIMITING CONDITIONS FOR OPERATION

F. Snubbers

All required snubbers shall be OPERABLE. The only snubbers excluded from this requirement are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse impact on any safety-related system.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2 and 3. OPERATIONAL MODE(s) 4 and 5 for snubbers located on systems required OPERABLE in OPERATIONAL MODE(s) 4 and 5.

ACTION:

With one or more snubbers inoperable, on any system, within 72 hours:

1. Replace or restore the inoperable snubber(s) to OPERABLE status, and

2. Perform an engineering evaluation per Specification 4.8.F.7 on the attached component.

Otherwise, declare the attached system inoperable and follow the appropriate ACTION statement for that system.

4.8 - SURVEILLANCE REQUIREMENTS

F. Snubbers

Each snubber shall be demonstrated OPERABLE by the performance of the following augmented inservice inspection program in addition to the requirements of Specification 4.0.E.

1. Inspection Types

As used in this specification, "type of snubber" shall mean snubbers of the same design and manufacturer, irrespective of capacity.

2. Visual Inspections

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table 4.8.F-1. The visual inspection interval for each type of snubber shall be determined based upon the criteria provided in Table 4.8.F-1[(a)].

3. Visual Inspection Acceptance Criteria

Visual inspections shall verify that: (1) the snubber has no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are functional, and (3) fasteners for the attachment of the snubber to the component and to the snubber anchorage are functional. Snubbers which appear inoperable as a result of

---

a The first inspection interval determined using this criteria shall be based upon the previous inspection interval as established by the requirements in effect before amendment nos 166 & 162.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

visual inspections shall be classified as unacceptable. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the ACTION requirements shall be met.

Snubbers originally classified as unacceptable may be reclassified as acceptable for the purpose of establishing the next visual inspection interval, provided that: (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers irrespective of type that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specification 4.8.F.6.

4. Transient Event Inspection

An inspection shall be performed of all snubbers attached to sections of systems that have experienced unexpected, potentially damaging transients, as determined from a review of operational data or a visual inspection of the systems, within 72 hours for accessible systems and 6 months for inaccessible systems following this determination. In addition to satisfying the visual inspection acceptance criteria, freedom-of-motion of mechanical snubbers shall be verified using at least one of the following: (1) manually induced snubber movement; or (2) evaluation of in-place snubber piston setting; or (3) stroking the mechanical snubber through its full range of travel.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

5. Functional Tests

At least once per 18 months, a representative sample of snubbers shall be tested using one of the following sample plans for each type of snubber. The sample plan shall be selected prior to the test period and cannot be changed during the test period. The NRC Regional Administrator shall be notified in writing of the sample plan selected prior to the test period or the sample plan used in the prior test period shall be implemented:

a. At least 10% of the total of each type of snubber shall be functionally tested either in-place or in a bench test. For each snubber of a type that does not meet the functional test acceptance criteria of Specification 4.8.F.6, an additional 10% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested; or

b. A representative sample of each type of snubber shall be functionally tested, in accordance with Figure 4.8.F-1. "C" is the total number of snubbers of a type found not meeting the acceptance requirements of Specification 4.8.F.6. The cumulative number of snubbers of a type tested is denoted by "N". At the end of each day's testing, the new values of "N" and "C" (previous day's total plus current day's increments) shall be plotted on Figure 4.8.F-1.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

If at any time the point plotted falls on or above the "Reject" line, all snubbers of that type shall be functionally tested. If at any time the point plotted falls on or below the "Accept" line, testing of snubbers of that type may be terminated. When the point plotted lies in the "Continue Testing" region, additional snubbers of that type shall be tested until the point falls in the "Accept" region or the "Reject" region, or all the snubbers of that type have been tested. Testing equipment failure during functional testing may invalidate that day's testing and allow that day's testing to resume anew at a later time, providing all snubbers tested with the failed equipment during the day of equipment failure are retested; or

c. An initial representative sample of 55 snubbers of each type shall be functionally tested. For each snubber type which does not meet the functional test acceptance criteria, another sample of at least one-half the size of the initial sample shall be tested until the total number tested is equal to the initial sample size multiplied by the factor, 1 + C/2, where "C" is the number of snubbers found which do not meet the functional test acceptance criteria. The results from this sample plan shall be plotted using an "Accept" line which follows the equation $N = 55(1 + C/2)$. Each snubber point should be plotted as soon as the snubber is tested. If the point plotted falls on or below the

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

"Accept" line, testing of that type of snubber may be terminated. If the point plotted falls above the "Accept" line, testing must continue until the point falls on or below the "Accept" line or all the snubbers of that type have been tested.

The representative sample selected for the functional test sample plans shall be randomly selected from the snubbers of each type and reviewed before beginning the testing. The review shall ensure as far as practical that they are representative of the various configurations, operating environments, range of size, and capacity of snubbers of each type.

Snubbers placed in the same location as snubbers which failed the previous functional test shall be retested at the time of the next functional test but shall not be included in the sample plan, and failure of this functional test shall not be the sole cause for increasing the sample size under the sample plan. If during testing, additional sampling is required due to failure of only one type of snubber, the functional testing results shall be reviewed at the time to determine if additional samples should be limited to the type of snubber which has failed the functional testing.

6. Functional Test Acceptance Criteria

The snubber functional test shall verify that:

a. Activation (restraining action) is achieved within the specified range in both tension and compression;

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

b. The force required to initiate or maintain motion of the snubber is within the specified range in both directions of travel; and

c. For snubbers specifically required not to displace under continuous load, the ability of the snubber to withstand load without displacement.

Testing methods may be used to measure parameters indirectly or parameters other than those specified if those results can be correlated to the specified parameters through established methods.

7. Functional Test Failure Analysis

An engineering evaluation shall be made of each failure to meet the functional test acceptance criteria to determine the cause for the failure. The results of this evaluation shall be used, if applicable, in selecting snubbers to be tested in an effort to determine the OPERABILITY of other snubbers irrespective of type which may be subject to the same failure mode.

For the snubbers found inoperable, an engineering evaluation shall be performed on the components to which the inoperable snubbers are attached. The purpose of this engineering evaluation shall be to determine if the components to which the inoperable snubbers are attached were adversely affected by the inoperability of the snubbers in order to ensure that the component remains capable of meeting the designed service.

3.8 - LIMITING CONDITIONS FOR OPERATION

4.8 - SURVEILLANCE REQUIREMENTS

If any snubber selected for functional testing either fails to lock up or fails to move, i.e., frozen-in-place, the cause will be evaluated and, if caused by manufacturer or design deficiency, all snubbers of the same type subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated in Specification 4.8.F.5 for snubbers not meeting the functional test acceptance criteria.

8. Functional Testing of Repaired and Replaced Snubbers

Snubbers which fail the visual inspection or the functional test acceptance criteria shall be repaired or replaced. Replacement snubbers and snubbers which have repairs which might affect the functional test result shall be tested to meet the functional test criteria before installation in the unit. Mechanical snubbers shall have met the acceptance criteria subsequent to their most recent service, and the freedom-of-motion test must have been performed within 12 months before being installed in the unit.

9. Snubber Service Life Program

The service life of all snubbers shall be monitored to ensure that the service life is not exceeded between surveillance inspections. The maximum expected service life for various seals, springs, and other critical parts shall be extended or shortened based on monitored test results and failure history. Critical parts shall be replaced so that the maximum service life will not be exceeded during a period when

TABLE 4.8.F-1

SNUBBER VISUAL INSPECTION CRITERIA

Population[a][b] or Category	NUMBER OF UNACCEPTABLE SNUBBERS		
	Column A [c][f] Extend Interval	Column B [d][f] Repeat Interval	Column C [e][f] Reduce Interval
1	0	0	1
80	0	0	2
100	0	1	4
150	0	3	8
200	2	5	13
300	5	12	25
400	8	18	36
500	12	24	48
750	20	40	78
≥1000	29	56	109

---

a The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of unacceptable snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, the decision must be made and documented before any inspection and shall be used as the basis upon which to determine the next inspection interval for that category.

b Interpolation between population or category sizes and the number of unacceptable snubbers is permissible. Use next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of unacceptable snubbers as determined by interpolation.

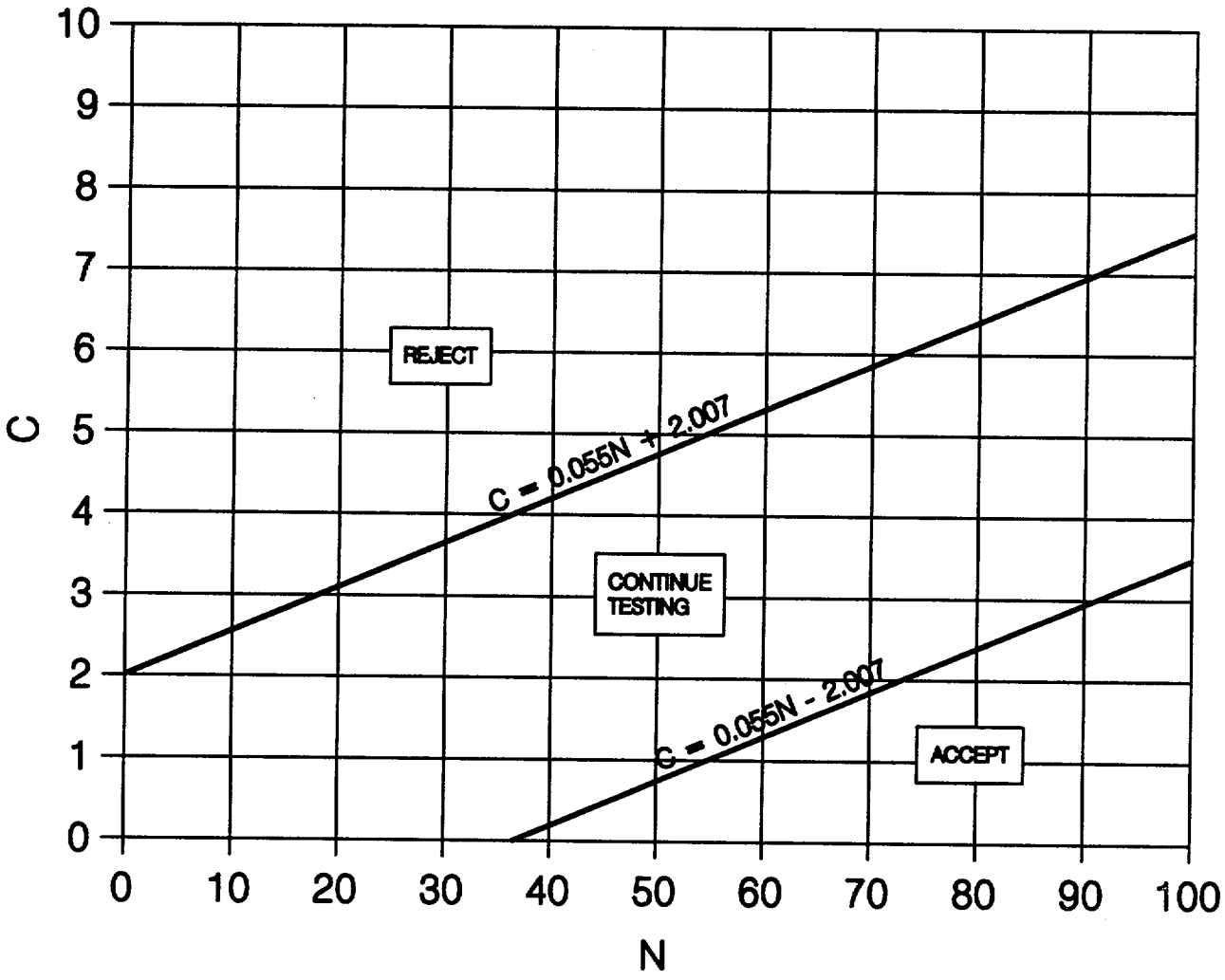
c If the number of unacceptable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval, but not greater than 48 months.

d If the number of unacceptable snubbers is equal to or less than the number in Column B but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.

e If the number of unacceptable snubbers is equal to or greater than the number in Column C, the next inspection interval shall be two-thirds of the previous interval, but not less than 31 days. However, if the number of unacceptable snubbers is less than the number in Column C but greater than the number in Column B, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of unacceptable snubbers found during the previous interval and the number in Column B to the difference in the numbers in Columns B and C.

f The provisions of Specification 4.0.B are applicable for all inspection intervals up to and including 48 months.

FIGURE 4.8.F-1
SAMPLING PLAN FOR SNUBBER FUNCTIONAL TESTING



N = Cumulative number of snubbers of a type tested.

C = Total number of snubbers of a type not meeting acceptance requirements.

3.8 - LIMITING CONDITIONS FOR OPERATION

G. Sealed Source Contamination

Each sealed source containing radioactive material either in excess of 100 μCi of beta and/or gamma emitting material or 5 μCi of alpha emitting material shall be free of $\geq$0.005 μCi of removable contamination.

APPLICABILITY:

At all times.

ACTION:

1. With a sealed source having removable contamination in excess of the above limit, withdraw the sealed source from use and either:

   a. Decontaminate and repair the sealed source, or

   b. Dispose of the sealed source in accordance with Commission Regulations.

2. With a sealed source leakage test revealing the presence of removable contamination in excess of the above limit, a report shall be prepared and submitted to the Commission on an annual basis.

3. The provisions of Specification 3.0.C are not applicable.

4.8 - SURVEILLANCE REQUIREMENTS

G. Sealed Source Contamination

1. Test Requirements - Each sealed source shall be tested for leakage and/or contamination by:

   a. The licensee, or

   b. Other persons specifically authorized by the Commission or an Agreement State.

   The test method shall have a detection sensitivity of at least 0.005 μCi per test sample.

2. Test Frequencies - Each category of sealed sources, excluding startup sources and fission detectors previously subjected to core flux, shall be tested at the frequency described below.

   a. Sources in use - At least once per 6 months for all sealed sources containing radioactive material:

      1) With a half-life >30 days, excluding Hydrogen 3, and

      2) In any form other than gas.

   b. Stored sources not in use - Each sealed source shall be tested prior to use or transfer to another licensee unless tested within the previous 6 months. Sealed sources transferred without a certificate indicating the last test date shall be tested prior to being placed into use.

3.8 - LIMITING CONDITIONS FOR OPERATION	4.8 - SURVEILLANCE REQUIREMENTS
	c. Startup sources and fission detectors - Each sealed startup source and fission detector shall be tested within 31 days prior to being subjected to core flux or installed in the core and following repair or maintenance to the source.

3.8 - LIMITING CONDITIONS FOR OPERATION

H. Offgas Explosive Mixture

The concentration of hydrogen in the offgas holdup system shall be limited to ≤4% by volume.

APPLICABILITY:

During offgas holdup system operation.

ACTION:

With the concentration of hydrogen in the offgas holdup system exceeding the limit, restore the concentration to within the limit within 48 hours. The provisions of Specification 3.0.C are not applicable.

4.8 - SURVEILLANCE REQUIREMENTS

H. Explosive Gas Mixture

The concentration of hydrogen in the offgas holdup system shall be determined to be within the above limits as required by Table 3.2.H-1 of Specification 3.2.H.

3.8 - LIMITING CONDITIONS FOR OPERATION

I. Main Condenser Offgas Activity

The release rate of the sum of the activities of the noble gases measured prior to the offgas holdup line shall be limited to ≤100 μCi/sec/MWt, after 30 minutes decay.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2[a] and 3[a].

ACTION:

With the release rate of the sum of the activities of the noble gases in the main condenser air ejector effluent (as measured prior to the offgas holdup line) >100 μCi/sec/MWt, after 30 minutes decay, restore the release rate to within its limit within 72 hours or be in at least STARTUP with the main steam isolation valves closed within the next 8 hours.

4.8 - SURVEILLANCE REQUIREMENTS

I. Main Condenser Offgas Activity

1. The release rate of noble gases from the main condenser air ejector shall be continuously monitored in accordance with the ODCM.

2. The release rate of the sum of the activities from noble gases from the main condenser air ejector shall be determined to be within the limits of Specification 3.8.I at the following frequencies[b] by performing an isotopic analysis of a representative sample of gases taken at the recombiner outlet, or the air ejector outlet, if the recombiner is bypassed:

   a. At least once per 31 days, and

   b. Within 4 hours following the determination of an increase, as indicated by the air ejector noble gas monitor, of >50%, after factoring out increases due to changes in THERMAL POWER level, in the nominal steady state fission gas release from the primary coolant.

---

a When the main condenser air ejector is in operation.

b The provisions of Specification 4.0.D are not applicable.

3.8 LIMITING CONDITIONS FOR OPERATION

J. Safe Shutdown Makeup Pump

The Safe Shutdown Makeup Pump (SSMP) shall be OPERABLE.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2 and 3 with reactor steam dome pressure greater than 150 psig.

ACTION:

1. With the SSMP system inoperable, restore the inoperable SSMP system to OPERABLE status within 67 days, or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

4.8 - SURVEILLANCE REQUIREMENTS

J. Safe Shutdown Makeup Pump

The SSMP system shall be demonstrated OPERABLE:

1. At least once per 31 days by:

   a. Verifying that each valve, manual, power operated or automatic in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.

   b. Verifying that the pump flow controller is in the correct position.

2. At least once per 92 days by verifying that the SSMP develops a flow of greater than or equal to 400 gpm in the test flow path with a system head corresponding to reactor vessel operating pressure of greater than 1150 psig.

3/4.8.A Residual Heat Removal Service Water System

The residual heat removal service water system, with the ultimate heat sink, provides sufficient cooling capacity for continued operation of the residual heat removal system and of other safety-related equipment, e.g., RHRSW vault coolers and the control room emergency ventilation system refrigeration units, during normal and accident conditions. The redundant cooling capacity of the system, assuming a single failure, is consistent with the assumptions used in the safety analysis to keep the accident conditions within acceptable limits. Since only one of the four pumps is required to provide the necessary cooling capacity, a thirty day repair period is allowed for one pump out of service. OPERABILITY of this system is also dependent upon special measures for protection from flooding in the condenser pit area.

3/4.8.B Diesel Generator Cooling Water System

The diesel generator cooling water system, with the ultimate heat sink, provides sufficient cooling capacity for continued operation of the diesel generators during normal and accident conditions. The cooling capacity of the system is consistent with the assumptions used in the safety analysis to keep the accident conditions within acceptable limits. OPERABILITY of this system is also dependent upon special measures for protection from flooding in the condenser pit area.

3/4.8.C Ultimate Heat Sink

The Mississippi River provides an ultimate heat sink with sufficient cooling capacity to either provide normal cooldown of the units, or to mitigate the effects of accident conditions within acceptable limits for one unit while conducting a normal cooldown on the other unit.

3/4.8.D Control Room Emergency Filtration System

The control room emergency filtration system maintains habitable conditions for operations personnel during and following all design basis accident conditions. This system, in conjunction with control room design, is based on limiting the radiation exposure to personnel occupying the room to five rem or less whole body, or its equivalent.

The frequency of tests and sample analysis is necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. The control room emergency filtration system in-place testing procedures are established utilizing applicable sections of ANSI N510-1980 standard. Operation of the system with the heaters OPERABLE for ten hours a month is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The charcoal adsorber efficiency test procedures allow for the removal of one representative sample cartridge and testing in accordance with the guidelines of ASTM-D-3803-89. The sample is at least two inches in diameter and has a length equivalent to the thickness of the bed. If the iodine removal efficiency test results are

unacceptable, all adsorbent in the system is replaced. HEPA filter particulate removal efficiency is verified to be at least 99% by in-place testing with a DOP testing medium.

3/4.8.E Flood Protection

Flood protection measures are provided to protect the systems and equipment necessary for safe shutdown during high water conditions. The equipment necessary to implement the appropriate measures, as detailed in plant procedures, is required to be available, but not necessarily onsite, to implement the procedures in a timely manner. The selected water levels are based on providing timely protection from the design basis flood of the river.

3/4.8.F Snubbers

Mechanical snubbers are provided to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic event or other event initiating dynamic loads. Snubbers are classified and grouped by design, manufacturer and accessibility. A list of individual snubbers with information of snubber location, classification or group, and system affected is maintained at the plant. The accessibility of each snubber is determined and documented for each snubber. The determination is based upon the existing radiation levels and the expected time to perform a visual inspection in each snubber location as well as other factors associated with accessibility during plant operation (e.g., temperature, atmosphere, location, etc.), and the recommendations of Regulatory Guides 8.8 and 8.10.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to the systems. Therefore, the required inspection interval varies with the number of unacceptable snubbers found during the previous inspection, the total population or category size for each snubber type, and the previous inspection interval. A snubber is considered unacceptable if it fails to satisfy the acceptance criteria of the visual inspection. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly as determined and documented prior to the inspections. The categorization is used as the basis for determining the next inspection interval for that category.

If a review and evaluation can not justify continued operation with an unacceptable snubber, the snubber is declared inoperable and the applicable action taken. To determine the next surveillance interval, the unacceptable snubber may be reclassified as acceptable if it can be demonstrated that the snubber is OPERABLE in its as-found condition by the performance of a functional test. The next visual inspection interval may be twice, the same, or reduced by as much as two-thirds of the previous inspection interval, depending on the number of unacceptable snubbers found in proportion to the size of the population or category for each type of snubber included in the previous inspection. The inspection interval may be as long as 48 months and the provisions of Specification 4.0.B may be applied.

When a snubber is found to be inoperable, an engineering evaluation is performed, in addition to the determination of the snubber mode of failure, in order to determine if any safety-related component or system has been adversely affected by the inoperability of the snubber. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

To provide additional assurance of snubber functional reliability , a representative sample of the installed snubbers will be functionally tested at 18 month intervals. This sample is identified using one of three methods:

1. Functionally test 10% of a type of snubber with an additional 10% tested for each functional testing failure, or

2. Functionally test a sample size and determine sample acceptance or rejection using Figure 4.8.F-1, or

3. Functionally test a representative sample size and determine sample acceptance or rejection using the stated equation.

Figure 4.8.F-1 was developed using "Wald's Sequential Probability Ratio Plan" as described in "Quality Control and Industrial Statistics" by Acheson J. Duncan.

Permanent or other exemptions from the surveillance program for individual snubbers may be granted by the NRC if a justifiable basis for exemption is presented and, if applicable, snubber life destructive testing was performed to qualify the snubber for the applicable design conditions at either the completion of their fabrication or at a subsequent date. Snubbers so exempted are listed in the list of individual snubbers indicating the extent of the exemptions.

The service life of a snubber is established via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubbers, seal replace, spring replaced, in high radiation area, in high temperature area, etc.). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records provide statistical bases for future consideration of snubber service life.

3/4.8.G Sealed Source Contamination

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values. Sealed sources, including startup sources and fission detectors, are classified into three groups according to their use, with surveillance requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed

within a shielded mechanism, i.e., sealed sources within radiation monitoring or boron measuring devices, are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

3/4.8.H Explosive Gas Mixture

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the offgas holdup system is maintained below the flammability limits of hydrogen and oxygen. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10CFR Part 50.

3/4.8.I Main Condenser Offgas Activity

Restricting the gross radioactivity rate of noble gases from the main condenser provides reasonable assurance that the total body exposure to an individual at the exclusion area boundary will not exceed a small fraction of the limits of 10CFR Part 100 in the event this effluent is inadvertently discharged directly to the environment without treatment. This specification implements the requirements of General Design Criteria 60 and 64 of Appendix A to 10CFR Part 50.

3/4.8.J Safe Shutdown Makeup Pump System (SSMP)

The SSMP system provides a common backup to the Unit 1 and 2 RCIC systems to satisfy the requirements of 10 CFR 50, Appendix R, Section III.G, "Fire Protection of Safe Shutdown Capability." The system bypasses fire zones which could theoretically disable the RCIC system.

In the event that the reactor vessel becomes isolated, and the feedwater supply becomes unavailable, makeup can be provided by manually initiating the SSMP system to supply demineralized makeup water from the CCST or as an alternate source, makeup water from the fire header. The flow rate of the SSMP system is approximately equal to the reactor water boil-off rate 15 minutes after shutdown.

The SSMP system is required to be OPERABLE when either Unit 1 or Unit 2 is in OPERATIONAL MODE(s) 1, 2 or 3 with reactor steam dome pressure greater than 150 psig. With the SSMP system inoperable, a 67-day allowable out-of-service (AOT) is provided to restore the inoperable system to OPERABLE status before the Unit(s) must be shut down. (Reference: Fire Protection Plan Documentation Package (FPPDP), "Fire Protection Reports," Volume 2, Tab 4, Safe Shutdown Analysis.)

The surveillance requirements provide adequate assurance that the SSMP system will be OPERABLE when required. A design flow test can be performed during plant operation using a full flow test return line to the CCST.

3.8 - LIMITING CONDITIONS FOR OPERATION	4.8 - SURVEILLANCE REQUIREMENTS
	the snubber is required to be OPERABLE. The parts replacements shall be documented and the documentation shall be retained in accordance with Specification 6.5.B.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 144 TO FACILITY OPERATING LICENSE NO. DPR-19, AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NO. DPR-25, AMENDMENT NO. 166 TO FACILITY OPERATING LICENSE NO. DPR-29, AND AMENDMENT NO. 162 TO FACILITY OPERATING LICENSE NO. DPR-30

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

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

1.0 INTRODUCTION

By letter dated September 10, 1993, as supplemented by letter dated June 16, 1995, Commonwealth Edison Company (ComEd, the licensee) submitted an amendment requesting to upgrade sections 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 its Technical Specification Upgrade Program (TSUP).

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, needed attention focused on the existing custom TS used at the sites.

The licensee made the decision to initiate a TSUP for both Dresden and Quad Cities. The licensee evaluated the current Technical Specifications (CTS) for both stations against the Standard Technical Specifications (STS), contained in NUREG-0123, "Standard Technical Specifications General Electric Plants BWR/4, Revision 4." Both Dresden and Quad Cities are BWR-3 designs and are nearly identical plants. The licensee's evaluation identified numerous potential improvements such as clarifying requirements, changing the TS to make them more understandable and to eliminate the need for interpretation, and deleting requirements that are no longer considered current with industry practice. As a result of the evaluation, ComEd 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 adoption of the STS. The TSUP focuses on (1) integrating additional information such as equipment operability requirements during shutdown conditions, (2) clarifying requirements such as limiting conditions for operations (LCO) and action statements utilizing STS terminology, (3) deleting superseded requirements and modifications to the TS based on the licensee's responses to generic letters (GLs), and (4) relocating specific items to more appropriate TS locations or to licensee controlled documents.

The application dated September 10, 1993, as supplemented June 16, 1995, proposed to upgrade only those sections of the TS to be included in TSUP Section 3/4.8 (Plant Systems) of the Dresden and Quad Cities TS.

The staff reviewed the proposed changes and evaluated all deviations and changes between the proposed TS, the STS, and the CTS. In no case did the licensee propose a change in the TS that would result in the relaxation of the current design requirements as stated in the Updated Final Safety Analysis Reports (UFSAR) for Dresden or Quad Cities.

The licensee submitted identical TS for Quad Cities and Dresden except for plant-specific equipment and design differences. Technical differences between the units are identified as appropriate in the proposed amendment.

2.0 EVALUATION

Review Guidelines - The licensee's purpose for the TSUP was to reformat the existing Dresden and Quad Cities TS into the easier to use STS format. Plant-specific data, values, parameters, and equipment-specific operational requirements contained in the CTS for Dresden and Quad Cities were retained by the licensee in the TSUP.

The STS contained in NUREG-0123 were developed by the NRC and industry because of the shortcomings associated with the custom TS which were issued to plants licensed in early 1970s (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 LCOs, 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 1970s. The STS were used as the licensing basis for plants licensed starting in the late 1970s.

For the most part, ComEd's adoption of the STS resulted in more restrictive LCOs and surveillance requirements (SR). In some cases, however, the STS provides relief from the Dresden and Quad Cities CTS requirements. In all these cases, the adoption of the STS requirements for LCOs or SR does not change the current design requirements of either plant as described in the each plant's UFSAR. In addition, the success criteria for the availability and operability of all required systems contained in the CTS are maintained by the adoption of the STS requirements in the proposed TSUP TS.

In addition to adopting the STS guidelines 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 reflect industry lessons learned in the 1980s and early 1990s.

Deviations between the proposed specifications, the STS, and the CTS were reviewed by the staff to determine if they were due to plant-specific features or if they posed a technical deviation from the STS guidelines. Plant-specific data, values, parameters, and equipment specific operational requirements contained in the CTS for Dresden and Quad Cities were retained by the licensee in the upgraded TS.

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 CTS or operational requirements. Every section of the proposed TS reflects this type of change.

More Restrictive Requirements - The proposed TSUP TS include certain more restrictive requirements than are contained in the existing TS. Examples of more restrictive requirements include the following: placing an LCO on plant equipment which is not required by the present TS to be operable; adding more restrictive requirements to restore inoperable equipment; and adding more restrictive SR.

Less Restrictive Requirements - The licensee provided a justification for less restrictive requirements on a case-by-case basis as discussed in this safety evaluation (SE). When requirements have been shown to provide little or no safety benefit, their removal from the TS may be appropriate. In most cases, these relaxations had previously been granted to individual plants on a plant-specific basis as 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 designs were reviewed to determine if the specific design basis was consistent with the STS contained in NUREG-0123. All changes to the CTS and deviations between the licensee's 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.).

Deviations the staff finds acceptable include: (1) adding 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 section, and (7) omitting the inclusion of STS steps that are not in existing TS.

Relocation of Technical Specifications - The proposed TS may include the relocation of some requirements from the TS to licensee-controlled documents. Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to state TS to be included as part of the license. The Commission's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories, including (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TS.

The Commission has provided guidance for the contents of TS in its "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" 58 FR 39132 (July 22, 1993), in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TS to licensee-controlled documents, consistent with the standard enunciated in *Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety."

The Final Policy Statement identified four criteria to be used in determining whether a particular matter is required to be included in the TS, as follows: (1) Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (3) a structure, system, or component that is part of a primary success path and which functions or actuates to mitigate a design-basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety. As a result, existing TS requirements which fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TS, while those TS requirements which do not fall within or satisfy these criteria may be relocated to other, licensee-controlled documents. The Commission recently amended 10 CFR 50.36 to codify and incorporate these four criteria (60 FR 36953).

The following sections provide the staff's evaluations of the specific proposed TS changes.

3.0 EVALUATION OF TSUP PROPOSED TS SECTION 3/4.8 PLANT SYSTEMS

The following sections provide the staff's evaluation of the TS changes reflected in proposed TS Section 3.8 (Plant Systems). The current Dresden and Quad Cities TS Section 3/4.8 requirements for Plant Systems have been incorporated into proposed TS Section 3/4.8. Proposed TS 3/4.8 have been developed in accordance with the guidelines of the STS Section 3/4.7, Plant Systems. The proposed TS are evaluated below.

3.1 TS 3/4.8.A: Containment Cooling Service Water (CCSW) System (Dresden) 3/4.8.A: RHR Service Water (RHRSW) System (Quad Cities)

Proposed TS Section 3/4.8.A for Dresden, "Containment Cooling Service Water System (CCSW)," has been formatted in accordance with the guidelines of STS Section 3/4.7.1. The CTS requirements for Dresden's CCSW system have been relocated from CTS Section 3/4.5.B and incorporated into proposed TS 3/4.8.A. Proposed TS 3/4.8.A for Quad Cities, "RHR Service Water System (RHRSW)," has been formatted in accordance with the guidelines of STS Section 3/4.7.1 and applicable guidance issued by NRC GLs. The CTS requirements for Quad Cities' RHRSW system have been relocated from CTS Section 3/4.5.B and incorporated into proposed TS 3/4.8.A. The system design descriptions for each system are described in each station's UFSAR Section 9.2.1.

3.1.1 LCO

Proposed LCO 3.8.A has been formatted in accordance with the guidelines of the STS Section 3.7.1. Proposed TS LCO 3.8.A has retained the requirements from both the Dresden and Quad Cities CTS Section 3.5.B.1. The proposed TS provides enhanced requirements to site operations personnel by clearly defining all the subsystem components. In addition, mode specific requirements are provided to define the times for which the LCO applies. CTS requirements do not provide such explicit requirements. These enhanced requirements help ensure that the appropriate controls are in place to address potential degraded conditions.

The staff finds the proposed LCO has retained all CTS requirements and has been formatted in accordance with the STS guidelines. In addition, the proposed TS enhance the CTS by eliminating operation's need for interpretations of the TS. Therefore, the staff finds the proposed LCO for proposed TS Section 3/4.8.A to be acceptable.

3.1.2 Applicability

Proposed TS 3.8.A, Applicability, has been formatted in accordance with the guidelines of the STS Section 3.7.1.1, Applicability, and requires operability in MODES 1, 2, 3, 4, 5, and *, with '*' requiring operability of CCSW when handling fuel in the secondary containment, CORE ALTERATIONS, and operations with a potential for draining the vessel. The CTS requirement for Dresden that specifies whenever fuel is in the vessel and the reactor coolant temperature is > 212 degrees Fahrenheit, has been retained in proposed

TS 3.8.A, Applicability. The CTS mode requirements for Dresden are equivalent to the proposed TS MODES 1, 2 and 3 requirements. The CTS for Quad Cities more specifically includes the requirements prior to reactor startup (i.e., entering into MODES 1, 2 and 3) from a "cold condition" (i.e., MODE 4) when discussing the applicability of the containment cooling mode of the RHR system. The Dresden and Quad Cities CTS TS requirements only specify MODES 1, 2 and 3 for the applicability of the CCSW and RHRSW systems. The proposed TS expand the CTS to include MODES 4, 5 and *. The proposed applicability provides enhanced requirements.

The applicability requirements specified in Quad Cities CTS Section 3.5.B.1.b and paragraph 2 of Quad Cities CTS Section 3.5.B.3 have not been retained within the proposed TS 3/4.8.A for Quad Cities. The CTS requirements were associated with an emergency TS change from Amendments 119/115 for Quad Cities, Units 1 and 2. The need for the change to the CTS has since expired and are no longer applicable; therefore, the staff finds that the deletion of CTS Section 3.5.B.1.b and paragraph 2 of CTS Section 3.5.B.3 from the applicability statements for the proposed TS to be acceptable.

The staff finds the proposed TS applicability statement has retained all the CTS requirements and has enhanced the CTS by expanding the applicability requirements for the CCSW and RHRSW systems. Therefore, the staff finds the proposed applicability statements for the proposed TS Section 3/4.8.A to be acceptable.

3.1.3 Required Actions

The required actions for proposed TS 3.8.A have been formatted in accordance with the STS guidelines. The proposed TS have retained the requirements of the CTS required actions from Section 3.5.B for Dresden and Quad Cities in accordance with the STS guidelines. The proposed TS requirements specify that the plant is to be in HOT SHUTDOWN within 12 hours and COLD SHUTDOWN within the following 24 hours if the LCO can not be met. Although the requirement to bring the plant to COLD SHUTDOWN has been extended, the additional requirement to bring the plant to HOT SHUTDOWN within 12 hours ensures that a shutdown is initiated sooner and the vulnerability to events that rely upon these systems is reduced as the plant achieves a lower operating MODE in a more expeditious time frame.

Proposed TS Section 3.8.A, ACTION 1.a, has retained CTS 3.5.B.2 requirements and STS 3.7.1.1, ACTION a.1. The CTS requirements specify that with one CCSW or RHRSW pump inoperable, return the pump to operable within 30 days. This requirement has been retained in the proposed TS requirements. Therefore, the staff finds the proposed TS 3.8.A, ACTION 1.a, acceptable.

Proposed TS Section 3.8.A, ACTION 1.b, is a new specification based on STS 3.7.1.1, ACTION a.2, guidelines. Proposed TS 3.8.A, ACTION 1.b, specifies with one pump in each subsystem inoperable, return the pumps to OPERABLE within 7 days. The proposed actions insures an adequate level of protection is provided by maintaining enough pumps operable to achieve safe shutdown.

The proposed TS also prevent unnecessary reactor shutdowns, because there are no corresponding CTS TS actions when one pump in each subsystem is inoperable. Present TS requirements would refer operators to CTS Section 3.0.A which would require the plant be brought to cold shutdown conditions within 24 hours. The proposed requirements provide an adequate level of protection for limiting the plant's vulnerability with inoperable CCSW or RHRSW pumps. Therefore, the staff finds the proposed required TS 3.8.A, ACTION 1.b, to be acceptable.

Proposed TS Section 3.8.A, ACTION 1.c, has retained the CTS requirements of Section 3.5.B.3 and has been formatted in accordance with the guidelines of the STS 3.7.1.1, ACTION a.3. The CTS requirements specify that with one subsystem inoperable, return the subsystem to OPERABLE within 7 days. CTS 3.8.A, ACTION 1.c, specifies with one subsystem inoperable, return the subsystem to OPERABLE within 72 hours for Dresden and 7 days for Quad Cities. The proposed requirements conservatively restrict the allowed outage time (AOT) for the CCSW subsystem from 7 days to 72 hours to assure that Dresden's vulnerability in this configuration is limited. The proposed TS AOT for Quad Cities of 7 days is sufficient due to the inherent system design redundancy of the RHRSW. At Dresden, two CCSW pumps are required to achieve post accident cooling while a Quad Cities only 1 pump is required to achieve post accident cooling ; thus, the reduction in the AOT from 7 days to 72 hours for the Dresden proposed TS is warranted. The proposed action requirements are applicable to the Dresden or Quad Cities plant design and provide an adequate level of protection for limiting the plant's vulnerability with inoperable CCSW or RHRSW pumps. Therefore, the staff finds the proposed required TS 3.8.A, ACTION 1.c, to be acceptable.

Proposed TS 3.8.A, ACTION 1.d, is a new TS for Dresden and Quad Cities and has been formatted in accordance with the STS guidelines. The proposed TS action provides a period of 8 hours to restore one subsystem to OPERABLE in the event both subsystems are inoperable. The proposed requirements specify a reasonable period of time to restore the subsystems to an OPERABLE status, and prevents a potential unnecessary reactor mode change which is currently required by CTS. Therefore, the staff finds the proposed TS 3.8.A, ACTION 1.d, to be acceptable.

CTS 3.5.B.4 for Quad Cities regarding containment cooling spray loops has been relocated to Proposed TS 3.7.L, Suppression Chamber and Drywell Spray. Proposed TS Section 3/4.7.L was approved by the staff in Amendment 143/137 for Dresden and 165/161 for Quad Cities.

CTS Section 3.5.B.3 requirements regarding the contingency that both core sprays (CS) and both emergency diesel generators (EDGs) be operable with one CCSW or RHRSW subsystem inoperable have been relocated to proposed TS 3.9.A (Electrical Power Systems), actions. Proposed TS 3.9.A requirements specify that with one EDG inoperable, one of the required two subsystems is required to be OPERABLE including its emergency power supply. For the CCSW or RHRSW subsystems, the emergency power supply is the EDG. Therefore, for the remaining CCSW or RHRSW subsystem, its operability, per the TS definition, is partially based upon the operability of its emergency power source (the

remaining EDG). Therefore, the CTS requirements for operability of the other EDG is redundant to those specified in TS 3/4.9. Because these requirements are redundant, the staff finds the relocation of the CTS requirements acceptable. TSUP TS Section 3/4.9. was approved by the staff in Amendments 138/132 for Dresden and 160/156 for Quad Cities.

CTS Section 3.5.B.3 requirements regarding the operability of both CS subsystems with one CCSW or RHRSW subsystem inoperable has not been retained within proposed TS Section 3/4.8.A. The design bases of the CCSW or RHRSW are to provide the containment cooling function to meet containment capability requirements. Each CS subsystem is designed to operate in conjunction with the low-pressure coolant injection (LPCI) subsystem and either the automatic depressurization system (ADS) or high-pressure coolant injection (HPCI) subsystems to provide adequate core cooling. The requirements for the CS system are dictated by the availability of the LPCI system. Therefore, more appropriate actions are incorporated in the actions specified for LPCI operability within proposed TSUP TS Section 3.5.A. Proposed TS Section 3.5.A, ACTIONS, specify that for the LPCI subsystem inoperable, both CS subsystems are required to be OPERABLE. Otherwise, the plant is required to be brought to HOT SHUTDOWN conditions within 12 hours. Proposed TS 3.5.A, ACTIONS, specify that for the CS subsystem, with one CS subsystem inoperable, the LPCI subsystem (four LPCI pumps and corresponding OPERABLE flow path) is required to be OPERABLE. Otherwise, the plant is required to be brought to HOT SHUTDOWN conditions within 12 hours. Proposed TS 3.5.A, ACTIONS, specify that for the ADS system, with one valve inoperable, the HPCI system, both CS subsystems and the LPCI subsystem are required to be OPERABLE. Otherwise, the plant is required to be brought to HOT SHUTDOWN conditions within 12 hours. Similar controls are in place for HPCI. Because sufficient redundancy of equipment remains available, the staff finds the deletion of CTS 3.5.B.3 requirements to be acceptable.

Based on the above evaluation, the staff finds the required actions for TS 3.8.A have retained the requirements of the CTS and have been formatted in accordance with the STS guidelines. Differences between the CTS requirements and the proposed TS have been evaluated above and found acceptable. Therefore, the staff finds the proposed required actions for TS 3.8.A to be acceptable.

3.1.4 Surveillance Requirements

Proposed TS 4.8.A has retained the SR of CTS Section 4.5.B.1.c for Dresden. Proposed TS 4.8.A are new requirements for Quad Cities. The proposed requirements are equivalent to existing Dresden requirements and add additional requirements for Quad Cities. The proposed SR require that once every 31 days, the proper system valve alignment be performed. The proposed SR are formatted in accordance with the STS guidelines.

CTS 4.5.B.1.a that requires pump/valve checks every 3 months has been relocated to the Dresden and Quad Cities Inservice Testing (IST) programs. The CTS requirements and IST testing requirements are equivalent. Revisions

to the IST program are controlled by the requirements of 10 CFR 50.55a. This regulation provides sufficient controls to ensure the pumps and valves are adequately tested. The proposed requirements are applicable to the Dresden and Quad Cities plant design and provide an adequate level of surveillance requirements for the CCSW or RHRSW system. The staff has determined that the requirements for the CCSW and the RHRSW pump testing frequency, flow parameters and post-maintenance testing requirements are not required to be in the TS under 10 CFR 50.36 or Section 182a of the Atomic Energy Act. Further, they do not fall within any of the four criteria discussed in Section 2.0, above. In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.55a, which requires licensee's to implement an IST program, to assure continued protection of public health and safety. Given these considerations, the staff finds relocating CTS 4.5.B.1.a to the IST program is acceptable and provides a reasonable methodology for the control of CCSW/RHRSW pump/valve surveillance.

CTS Section 4.5.B.1.b requirements related to the CCSW/RHRSW pump flow parameters and pump post-maintenance testing has been relocated to the Dresden and Quad Cities IST programs. The specific parameters listed are acceptance criteria that are redundant to the administrative controls established in the IST program. These parameters are more appropriate for control within the IST program as stated above. The details relating to system design, function and OPERABILITY are not necessary for inclusion within the TS. The definition of OPERABILITY for the system suffices. If maintenance on a pump may have impacted its OPERABILITY, the IST program ensures that appropriate testing is performed to demonstrate the OPERABILITY of the pump. Given these considerations, the staff finds relocating CTS 4.5.B.1.b requirements to the IST program is acceptable and provides a reasonable methodology for the control of CCSW/RHRSW pump/valve surveillance. The staff has determined that the requirements for the CCSW and the RHRSW pump testing frequency, flow parameters and post-maintenance testing requirements are not required to be in the TS under 10 CFR 50.36 or Section 182a of the Atomic Energy Act. Further, they do not fall within any of the four criteria discussed in Section 2.0, above. In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.55a, which requires licensee's to implement an IST program, to assure continued protection of public health and safety. Therefore, these changes are acceptable.

CTS 4.5.B.1.c for Quad Cities regarding the performance of a logic system functional test each refueling outage has been relocated and incorporated within the proposed TSUP TS Section 3/4.2, Instrumentation, requirements for the (LPCI system). TSUP TS Section 3/4.2 was approved by the staff in Amendments 142/136 for Dresden and 164/160 for Quad Cities.

CTS 4.5.B.2 requirements for Quad Cities (5-year smoke tests) has been relocated to proposed TSUP TS Section 4.7.L, "Suppression Chamber and Drywell Spray." TSUP TS Section 3/4.7 was approved by the staff in Amendments 143/137 for Dresden and 165/161 for Quad Cities.

The current requirements for flood protection of the Dresden CCSW and Quad Cities RHRSW have been relocated from the CTS to the UFSAR. Changes to the UFSAR are controlled per the provisions of 10 CFR 50.59. The CTS requirements specified for the flood protection vaults are design details. The details relating to system design, function and OPERABILITY are not necessary for inclusion within the TS. The definition of OPERABILITY for the system suffices. The staff has determined that the requirements for flood protection of the CCSW system for Dresden and the RHRSW system for Quad Cities are not required to be in the TS under 10 CFR 50.36 or Section 182a of the Atomic Energy Act. Further, they do not fall within any of the four criteria discussed in Section 2.0, above. In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.59. Because the requirements provide design details or function, more appropriately controlled outside of the TS, the NRC staff finds the relocation of the flood protection requirements acceptable.

Based on the above, the staff finds the proposed TS SR has been formatted in accordance with the STS guidelines. The proposed TS SR have retained the CTS requirements from Dresden and add new SR for Quad Cities. Specific pump and valve testing, as indicated above, has been relocated to the Station's IST programs and found acceptable. Therefore, the staff finds proposed SR 4.8 to be acceptable.

3.1.5 Conclusion

Based on the above evaluation, the staff finds that proposed TS 3/4.8.A has been formatted in accordance with the guidelines of the STS and has retained the CTS requirements. Deviations from the CTS requirements have been reviewed and found that they do not reduce the margin of safety for Dresden or Quad Cities. Therefore, the staff finds proposed TS Section 3/4.8.A to be acceptable.

3.2 TS 3/4.8.B: Diesel Generator Cooling Water System

There are no CTS requirements for the Diesel Generator Cooling Water (DGCW) system for Dresden or Quad Cities Station. Proposed TS Section 3/4.8.B is a new section that is based on STS Section 3/4.7.1.2 guidelines. The STS requirements are not directly applicable to the Dresden or Quad Cities plant designs. Therefore, the LaSalle TSs were also used as a model for Dresden and Quad Cities.

3.2.1 LCO

The proposed LCO for TS 3/4.8.B has been formatted in accordance with the STS guidelines and the LaSalle County Station TS, since the system design is similar to LaSalle's. The LCO defines a DGCW subsystem as one operable DGCW pump and operable flow path. The proposed requirements are applicable to the Dresden and Quad Cities plant design and provide an adequate level of protection for ensuring the availability of the EDG system is maintained. Because the proposed TS provide additional requirements to the CTS and are

consistent to the current plant designs, the staff finds the proposed LCO for proposed TS 3/4.8.B to be acceptable.

3.2.2 Applicability

The proposed Applicability for TS 3/4.8.B is consistent to the format of the current requirements in the LaSalle County Station TS. The proposed applicability statement requires the DGCW system to be operable whenever diesel generators are required to be operable. The current requirements for the DGCW at Dresden and Quad Cities are administratively controlled. The proposed changes add additional restrictions and are consistent with Dresden and Quad Cities plant designs. Therefore, the staff finds the proposed applicability requirements for Section 3/4.8.B of the proposed TS to be acceptable.

3.2.3 Required Actions

The proposed required actions have been formatted in accordance with the LaSalle TS since the system design is similar to LaSalle's. For one or more inoperable DGCW subsystems the proposed required action renders the associated diesel generator inoperable and those TS required actions must be taken. Because the proposed TS provide additional requirements consistent to the current plant designs, the staff finds the proposed required action for TS 3/4.8.B acceptable.

3.2.4 Surveillance Requirements

The proposed SRs for TS Section 3/4.8.B require verification every 31 days that the valves in the flow path are in the correct position and every 18 months that the pumps start automatically. The proposed SR have been formatted in accordance with the STS guidelines. The proposed requirements are applicable to the Dresden and Quad Cities plant design and provide additional requirements not included in the CTS. Because the proposed TS provide additional requirements consistent to the current plant designs, the staff finds the proposed SR acceptable.

3.2.5 Conclusion

Based on the above evaluation, the staff finds that proposed TS 3/4.8.B "Diesel Generator Cooling Water System" is an enhancement of CTS and has adopted the guidelines of the STS. Therefore, the staff finds proposed TS Section 3/4.8.B to be acceptable.

3.3 TS 3/4.8.C: Ultimate Heat Sink

There are no CTS requirements for the ultimate heat sink for either Dresden or Quad Cities Station. Proposed TS 3/4.8.C is a new section that is based on STS Section 3/4.7.1.3. The system design description for the ultimate heat sink is described in UFSAR, Section 9.2.5, for both stations.

3.3.1 LCO

The proposed new LCO has been formatted in accordance with the STS guidelines. The proposed TS require the ultimate heat sink be operable with a minimum water level at 500 feet mean sea level for Dresden, at 561 feet for Quad Cities and an average water temperature less than or equal to 95 degrees Fahrenheit. The proposed requirements are applicable to the Dresden and Quad Cities plant system design and provide an adequate level of protection for ensuring this system is adequately maintained in accordance with the STS guidelines. Because the proposed TS provide additional requirements consistent with the current plant designs, the proposed LCO for TS 3.8.C is acceptable.

3.3.2 Applicability

The proposed new requirements are based on the STS 3.7.1.3, Applicability statement. The proposed TS require the ultimate heat sink be operable in all modes of operation for both stations. The proposed requirements are applicable to the Dresden and Quad Cities plant system design and provide an adequate level of protection for ensuring that this system is adequately maintained. Because the proposed TS provide additional requirements consistent to the current plant designs, the staff finds the proposed applicability statement for TS 3.8.C acceptable.

3.3.3 Required Actions

The proposed new required actions have been formatted in accordance with the guidelines of STS Section 3.7.1.3, ACTIONS. The proposed required action in operational MODES 1, 2 and 3 requires immediate shutdown if the LCO can not be met. In operational MODES 4, 5 and "*" the proposed TS require that if the LCO can not be satisfied, the DGCW system be declared inoperable and those TS required actions be taken to declare the associated diesel generator inoperable, in accordance with the STS guidelines. The proposed requirements are applicable to the Dresden and Quad Cities plant system design and provide an adequate level of protection for ensuring that the ultimate heat sink is adequately maintained. Because the proposed changes provide additional restrictions not currently included in the TS, the proposed required actions for TS 3.8.C are acceptable.

3.3.4 Surveillance Requirements

Proposed new TS 4.8.C SRs are formatted in accordance with the STS guidelines. The proposed TS require surveillances be performed on the ultimate heat sink once every 24 hours to justify their operability. Because the proposed SRs provide additional requirements not currently included in the CTS, the staff finds the proposed SRs for TS 3/4.8.C acceptable.

3.3.5 Conclusion

Based on the above evaluation, the staff finds that proposed TS 3/4.8.C "Ultimate Heat Sink" has adopted the guidelines of the STS. The proposed TS provides new requirements for the ultimate sink at both the Dresden and Quad Cities Stations that are enhancements of the CTS. Therefore, the staff finds proposed TS Section 3/4.8.C to be acceptable.

3.4 TS 3/4.8.D: Control Room Emergency Filtration System (CREFS)

Proposed Specification 3/4.8.D, "Control Room Emergency Filtration System," is a new TS for Dresden and incorporates CTS requirements from Quad Cities. There are no CTS requirements for the CREFS at Dresden. CREFS is presently administratively controlled at Dresden Station. The proposed TS had been formatted in accordance with STS guidelines.

3.4.1 LCO

Proposed LCO 3.8.D has been formatted in accordance with the guidelines of STS Section 3/4.7.2. Current Quad Cities CTS Section 3.8.H requires the control room emergency filtration system to be operable. There is no current LCO requirement in the Dresden CTS. The staff finds the proposed LCO has been formatted in accordance with the STS guidelines and has retained the current Quad Cities CTS requirements and added new TS requirements for Dresden. Therefore, the proposed LCO for TSUP Section 3.8.D is acceptable.

3.4.2 Applicability

The proposed applicability statement has been formatted in accordance with the STS guidelines. The proposed applicability requirements have retained the CTS requirements from the Quad Cities TS and added applicability requirements for Dresden. The footnote defining "*" has been added to both Dresden and Quad Cities CTS based on the STS guidelines to maintain uniformity with TS 3/4.8.A. Because proposed applicability statement has retained the CTS requirements of Quad Cities and new requirements are added for Dresden Station, the staff finds the proposed Applicability Statement for proposed TS 3.8.D is acceptable.

3.4.3 Required Actions

The proposed required actions for TS 3/4.8.D have been formatted in accordance with the guidelines of STS Section 3/4.7.2. The proposed TS required actions have retained the required action from the Quad Cities CTS Section 3/4.8.H and provide new TS requirements for Dresden. CTS requirements of Quad Cities have an AOT of 14 days.

In the originally proposed TS required action, the licensee proposed maintaining the 14 day AOT from Quad Cities CTS requirements for the CREFS. The staff reviewed the 14 day AOT for the Dresden Station and found it unacceptable. By letter dated June 16, 1995, ComEd proposed to revise the AOT

for CREFS from 14 days to 7 days and add TS requirements for the Control Room Filtration and Air Conditioning System. The revision will maintain the Control Room environment suitable for plant personnel habitability and for equipment functional reliability under all plant conditions. The above issues will remain as an open item, contingent upon the licensee providing the specific details of the TS and the staff's review and approval in the TSUP clean-up package.

3.4.4 Surveillance Requirements

Proposed TS 4.8.D has been formatted in accordance with the STS guidelines Section 4.7.2. The proposed TS is also based upon the recommendations in GL 93-05, "Line-Item Technical Specification Improvements to Reduce Surveillance Requirements for Testing During Power Operation," and NUREG 1366, "Improvements to Technical Specifications Surveillance Requirements."

Proposed TS 4.8.D.1 adds a new requirement for both the Dresden and Quad Cities TS. Proposed TS 4.8.D.1 requires that once per 12-hours the control room temperature is verified to be $\leq$ 95 degrees Fahrenheit. This value provides for equipment functional reliability, with sufficient margin to ensure reliable human performance. The staff finds the proposed TS SR acceptable.

Proposed TS 4.8.D.2 revises the CTS acceptance criteria for the monthly CREFS initiation of air flow through the HEPA filters and charcoal adsorbers to require 10 hours of operation with the heaters operating. The current Quad Cities TS only requires that the heaters be operable. There are no CTS requirements for Dresden. The proposed TS revises Quad Cities CTS requirements by clarifying the purpose of heater operation during the required monthly surveillance. The purpose of heater operation during the surveillance is to reduce the build-up of moisture on the HEPA filters and charcoal adsorbers. The proposed requirements will continue to ensure heater availability by reducing moisture build-up; therefore, the staff finds the proposed SR acceptable.

Proposed TS 4.8.D.3 requires that once per 18 months or after maintenance or operational events that could affect the reliability of charcoal adsorber and HEPA filter, that surveillance be performed to verify the adsorber and filter operation. Proposed TS 4.8.D.3 retains the Quad Cities CTS 4.8.H.2 requirements that specify leak tight verifications and carbon test canister analysis be performed. The proposed TS also add new additional surveillances which require that if maintenance is performed on the HEPA filter or the charcoal adsorber housing operability testing is performed. The proposed TS is consistent with STS guidelines. Because the proposed requirements are consistent with STS guidelines and provide additional requirements not included within the current Quad Cities TS and add new TS requirements for Dresden, the staff finds the proposed SR acceptable.

Proposed SR 4.8.D.4 requires that after 1440 hours of charcoal adsorber operation that certain laboratory test be performed to verify the CREFS operability. The proposed SR is consistent with the STS guidelines with the exception that the proposed SR utilizes a 1440 hour service usage testing requirement (STS = 720) based on historical test results. The proposed 1440 hour service usage interval maintains the current requirements contained within the current Quad Cities TS Section 3/4.7. The licensee has not provided sufficient justification for the use of the 1440 value in the proposed Dresden TSUP SR. This will remain as an open item for both Dresden and Quad Cities until the licensee provides sufficient information in the TSUP clean-up amendment package to justify the 1440 value proposed in the SR.

Proposed SR 4.8.D.5.a requires that once per 18 months that the CREFS system be shown operable by verifying that the pressure drop across the filters and adsorbers is within a specified range. The proposed TS retains the Quad Cities CTS requirements and adds new requirements for Dresden and is, therefore, acceptable.

Proposed TS 4.8.D.5.b is a new requirement for Dresden and Quad Cities which requires verification that isolation dampers close on initiation. For Quad Cities, the proposed surveillance contains the requirement for verification of isolation on manual initiation and upon simulated automatic isolation signal. The proposed TS for Dresden does not include automatic isolation mode actuation requirements. The Dresden design does not incorporate an automatic isolation function. Because the proposed requirements are consistent with the plant system design and provide additional requirements not incorporated within the CTS for Dresden and Quad Cities, the staff finds the proposed SR acceptable.

Proposed TS 4.8.D.5.c is a new requirement for Dresden and Quad Cities which verifies that positive pressure be maintained in the control room. The proposed surveillance does not include the STS guidelines of automatic pressurization mode requirements. The Dresden and Quad Cities design does not incorporate an automatic pressurization mode initiation function. The system is manually initiated. Because current design requirements are maintained, the staff finds the proposed SR acceptable.

Proposed TS 4.8.D.5.d verifies that the heaters dissipate an adequate amount of heat. The current Quad Cities TS requires that a specific differential temperature be demonstrated. The proposed TS requires a range of kW values. Requiring a range of kW values will prevent misinterpretation of the TS required testing. The STS guidelines for this surveillance have been supplemented to retain current plant specific provisions for voltage variations at the power source. Variation in supply voltage from 480 volts is expected; therefore, heater power consumption will be affected by the supply voltage changes. The proposed changes will ensure that the heaters will continue to provide the rated capacity necessary to ensure appropriate humidity limits are maintained at the charcoal adsorber inlet. Allowing for a voltage correction and rated kW value with an acceptance range will prevent potential TS misinterpretation in the future. Because the proposed

requirements are consistent with the plant system design for the CREFS heater and provide additional requirements not located within the CTS for Dresden and Quad Cities, the staff finds the proposed SR acceptable.

Proposed SR 4.8.D.6 and 4.8.D.7 requires that after complete or partial replacement of the HEPA filter bank or charcoal adsorber bank the filter bank and/or the charcoal adsorber bank has to satisfy a specified in-place penetration and leakage test. The proposed SRs retain the Quad Cities CTS requirements and add additional requirements to the Dresden TS.

The staff found the proposed SRs for the CREFS have incorporated the CTS requirements from Quad Cities and added new SRs for the Dresden Station. The proposed SR have been formatted in accordance with the STS guidelines and modified as indicated above to match the design configuration of CREFS at both Dresden and Quad Cities. Based on the above, the staff finds the proposed SR acceptable with the exception of the above open item.

3.4.5 Conclusion

Based on the above evaluation, the staff finds that proposed TS 3/4.8.D, "Control Room Emergency Filtration System (CREFS)," has adopted the guidelines of the STS. The deviations from the CTS provide enhancements to the TS and do not reduce the margin of safety for Dresden or Quad Cities. The proposed TS add new requirements for Dresden. Therefore, the staff finds proposed TS Section 3/4.8.D to be acceptable with the exception of the above-mentioned open items.

3.5 TS 3/4.8.E: Flood Protection

Proposed Specification 3/4.8.E, "Flood Protection," is a new specification for both Dresden and Quad Cities. TS 3/4.8.E is based on STS 3/4.7.3. Proposed actions and surveillance are added to the specifications in accordance with STS guidelines and current flood protection procedures. The proposed TS section is consistent with the current plant design requirements and maintains the current safety margin for Dresden and Quad Cities.

3.5.1 LCO

Proposed new TS 3.8.E, LCO, has been formatted in accordance with STS Section 3.7.3, LCO. The proposed LCO requires flood protection be provided at all times. The proposed Dresden and Quad Cities TS will ensure the appropriate LCOs are in place for plant flood protection. The proposed requirements are applicable to the Dresden and Quad Cities plant design and provide an adequate level of protection for plant flood protection. Because the proposed requirements are new restrictions imposed upon Dresden and Quad Cities applicable to the plant design that ensure that flood protection provisions are adequately maintained, the staff finds the proposed LCO for proposed TS Section 3/4.8.E acceptable.

3.5.2 Applicability

Proposed new TS 3.8.E, Applicability, is based on STS Section 3.7.3, Applicability. The proposed TS require that flood protection be provided at all times. The proposed requirements are applicable to the Dresden and Quad Cities plant system design and provide an adequate level of protection for plant flood protection. Because the proposed requirements are new restrictions imposed upon Dresden and Quad Cities applicable to the plant design that ensure that flood protection provisions are adequately maintained, the staff finds the Applicability Statement for proposed TS 3/4.8.E is acceptable.

3.5.3 Required Actions

Proposed new TS 3.8.E, ACTIONS, have been formatted in accordance with the guidelines of STS Section 3.7.3, ACTIONS. The proposed required actions deviate from STS action guidelines by maintaining administrative control over the plant-specific flood protection measures. STS guidelines specify that the flood protection measures are to be identified and listed within the action statement. The staff finds the use of administrative controls to maintain specific flood protection requirements acceptable.

The proposed TS deviates from STS guidelines by including additional actions to be taken in the event that flood levels are predicted to be exceeded rather than when the actual flood levels are exceeded. Because the proposed requirements are new restrictions imposed upon Dresden and Quad Cities applicable to the plant design that ensure that flood protection provisions are adequately maintained, the staff finds the required actions for proposed TS Section 3/4.8.E acceptable.

3.5.4 Surveillance Requirements

Proposed new TS 4.8.E has been formatted in accordance with the guidelines of STS Section 4.7.3. Plant specific parameters consistent with the Dresden or Quad Cities plant design have been included. The proposed Dresden and Quad Cities TS will ensure the appropriate surveillances are performed at a minimum of once every 24 hours to periodically demonstrate plant flood protection requirements. The proposed requirements are applicable to the Dresden and Quad Cities plant design and provide an adequate level of protection for plant flood protection. Because the proposed requirements are new restrictions imposed upon Dresden and Quad Cities applicable to the plant system design that ensure that flood protection provisions are adequately maintained, the staff finds the SRs for proposed TS 3/4.8.E acceptable.

3.5.5 Conclusion

Based on the above evaluation, the staff finds that proposed new TS 3/4.8.E, "Flood Protection," has adopted the guidelines of the STS and the deviations from the STS requirements do not reduce the margin of safety for Dresden or

Quad Cities. The staff finds proposed TS Section 3/4.8.E adds new requirements to the CTS and is therefore acceptable.

3.6 TS 3/4.8.F: Snubbers

The proposed TS 3/4.8.F, "Snubbers," has been formatted in accordance with the STS guidelines as modified by GL 84-13 and GL 90-09. GL 84-13 provided guidance for deletion of the snubber tables from the TSs. GL 90-09 modified the BWR STS by recommending changes to the text of the SRs for visual inspections and visual inspection acceptance criteria. The proposed TS retains the CTS requirements Section 3/4.6.I. The CTS 3.6.I requirements for Quad Cities had previously have been modified and approved by the staff on July 13, 1994, in Amendments 149/145, to be consistent with the STS guidelines and GL 90-09 and GL 84-13. Proposed TS LCO 3.8.F specifies that all required snubbers shall be operable - the only snubbers excluded from this requirement are those installed on non-safety-related systems and then only if their failure or failure of the system on which they are installed would not have adverse impact on any safety related systems.

3.6.1 LCO

Proposed LCO 3.8.F has been formatted in accordance with the guidelines of STS and GL 84-13 and GL 90-09. Proposed TS LCO 3.8.F retains the requirements from CTS Section 3.6.I. Snubbers are provided to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic event or other event initiating dynamic loads. The proposed LCO requirements will continue to assure the operability of the snubbers, therefore, the staff finds the proposed LCO for TS 3.8.F acceptable.

3.6.2 Applicability

The proposed Applicability for TS 3/4.8.F has been formatted in accordance with the guidelines of the STS. The proposed applicability retains the requirements from CTS 3/4.6.I. The CTS requires snubbers to be operable during all modes of operation except cold shutdown (TS MODE 4) and refueling (TS MODE 5). The proposed TS requirements expand the applicability to include snubbers on systems that are required OPERABLE during MODES 4 and 5. The staff finds the proposed Applicability for TS 3.8.F is an enhancement and is, therefore, acceptable.

3.6.3 Required Actions

The proposed TS 3/4.8.F, required actions have been formatted in accordance with STS guidelines as modified by GL 90-09 and GL 84-13. CTS Section 3.6.I.2 requirements states "From and after the time a snubber is determined to be inoperable, continued reactor operation is permissible only during the succeeding 72 hours unless the snubber is sooner made operable or replaced." In addition, CTS Section requirements 3.6.I.3 states "If the requirements of 3.6.I.1 and 3.6.I.2 can not be met, an orderly shutdown shall be initiated and

reactor shall be in cold shutdown or refuel condition within 36 hours." The proposed TS 3.8.F relaxes the current requirements of shutting down the plant if a snubber is declared inoperable. The proposed TS are formatted in accordance with the guidance contained in GLs 84-13 and 90-09, which provide that if a snubber is declared inoperable you shall declare the system to which the snubber is attached and supports, inoperable and subsequently follow the action requirements for the affected system. This potentially extends the CTS AOT for snubbers. However, the more specific requirements outlined within the proposed TS 4.8.F SRs in conjunction with the proposed AOT compensate for this relaxation. In addition, the proposed TS action requirements maintain adequate levels of plant safety such that, the proposed TS requirements, taken as a whole, do not reduce existing plant safety margins; therefore, the staff finds the proposed required actions for TS 3.8.F acceptable.

3.6.4 Surveillance Requirements

The proposed SR for TS 4.8.F have been formatted in accordance with the STS guidelines as modified by GL 84-13 and GL 90-09. The proposed SR have retained CTS Section 4.6.I requirements. Because the proposed requirements have retained the CTS requirements and have been formatted in accordance with the STS guidelines as modified by GLs 84-14 and 90-09 requirements, the NRC staff finds the SR for TS 4.8.F acceptable.

3.6.5 Conclusion

Based on the above evaluation, the staff finds that proposed TS 3/4.8.F "Snubbers" has adopted the guidelines of the STS as modified by GL 84-13 and GL 90-09. Deviations from the CTS requirements do not reduce the margin of safety. Therefore, the staff finds proposed TS Section 3/4.8.F to be acceptable.

3.7 TS 3/4.8.G: Sealed Sources

Proposed TS Section 3/4.8.G, "Sealed Sources," has been formatted in accordance with the guidelines of STS Section 3/4.7.6. CTS requirements for Dresden Section 3/4.G and 3/4.F for Quad Cities have been incorporated into proposed TS 3/4.8.G.

3.7.1 LCO

Proposed TS 3.8.G, LCO, has retained the requirements from current Dresden TS 3.8.G and current Quad Cities TS 3.8.F and is consistent with STS 3.7.6, LCO. The proposed LCO specifies the limit for the amount of removable contamination on a sealed source. The proposed limits retain the CTS limits. Therefore, the proposed TS requirements provide an adequate level of protection regarding sealed source controls. Therefore, the staff finds the proposed LCO for TS 3.8.G to be acceptable.

The CTS also contain a requirement that an inventory of radioactive materials be maintained. This has been deleted in the proposed TS consistent with STS

3/4.7.6. The current requirement provides information that is inappropriate for inclusion within the TS. As such, the requirements to maintain a complete inventory of radioactive material will be administratively controlled as well as controlled by 10 CFR Parts 30, 40 and 70. These procedural details that have been removed from the TS are not required by the Commission's regulations to be included in the TS. They have been relocated to administrative controls. The staff has concluded that relocation of the inventory control requirements is acceptable because (1) their inclusion in TS is not specifically required by 10 CFR 50.36 or other regulations, and (2) inventory control is not required to avert an immediate threat to the public health and safety. The staff has determined that the requirements for these systems are not required to be in the TS under 10 CFR 50.36 or Section 182a of the Atomic Energy Act. Further, they do not fall within any of the four criteria discussed in Section 2.0, above. Because the requirements provide design details or function, more appropriately controlled outside of the TS, the NRC staff finds the relocation of these details acceptable.

The proposed change provides an equivalent level of protection for the plant. Because the requirements will continue to be controlled, the staff finds the proposed changes acceptable. Based on the above, the staff finds the proposed LCO for TS 3.8.G acceptable.

3.7.2 Applicability

Proposed TS 3.8.G, Applicability, has incorporated the requirements of current Dresden TS 3.8.G and current Quad Cities TS 3.8.F, and is based on STS 3.7.6, Applicability. The proposed TS maintain the CTS applicability of "at all times." Because the proposed TS Applicability maintains the CTS requirements the proposed Applicability statement is acceptable.

3.7.3 Required Actions

TS 3.8.G, required actions have been formatted in accordance with the guidelines of STS Section 3.7.6. The proposed TS required actions have retained all the CTS TS requirements from Dresden and Quad Cities. The proposed required actions specify that if a sealed source exceeds the specified limit, the sealed source is either decontaminated or be properly disposed of. In addition reporting requirements are also required. Therefore, the staff finds the proposed required actions for TS 3.8.G acceptable.

3.7.4 Surveillance Requirements

Proposed TS SRs 4.8.G have been formatted in accordance with the guidelines of STS Section 4.7.6. The proposed SR have incorporated the CTS requirements from Dresden and Quad Cities. The STS terminology of "sealed sources and fission detectors" has been shortened to "sealed sources" since fission detectors are considered to be sealed sources by the LCO. This deviation from STS language is administrative in nature, consistent with the current licensing basis and does not adversely affect existing plant safety margins.

The proposed TS provides an adequate level of testing regarding sealed sources. Therefore, the staff finds the proposed SR for TS 4.8.G acceptable.

3.7.5 Conclusion

Based on the above evaluation, the staff finds that proposed TS 3/4.8.G "Sealed Sources" has adopted the guidelines of the STS and incorporated the existing CTS requirements. Therefore, the staff finds proposed TS Section 3/4.8.G to be acceptable.

3.8 Relocation of TS

The radiological effluent TS (RETS) from CTS Section 3/4.5 have been relocated to owner-controlled documents based on the guidelines of GL 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications in the Administrative Controls Section of Technical Specifications and Relocation of Procedural Details of RETS to the Offsite Dose Calculational Manual or the Process Control Program." RETS provide the offsite release limits and radiation dose limits and monitoring and reporting criteria for gaseous and liquid radioactive effluents. RETS are not related to the detection of abnormal degradation of the reactor coolant pressure boundary, boundary conditions for design basis accidents and transients, or functions determined to be important to risk or operating experience. Therefore, the staff had determined that programmatic controls could be implemented in the Administrative Controls section of the TS to satisfy the existing regulatory requirements for RETS. The staff also determined that the procedural details of the TS on radioactive effluents and radiological environmental monitoring could be relocated to the Offsite Dose Calculational Manual (ODCM), while the procedural details for processing wet solid wastes could be relocated to the Process Control Program (PCP).

In accordance with the guidance of GL 89-01, the proposed TS will relocate the following CTS to the ODCM or the PCP.

Specification	Title
3/4.8.A	Gaseous Effluents (this TS has been partially relocated to the ODCM and the remaining portions relocated to TS 3/4.2, 3/4.8.H, and 3/4.8.I)
3/4.8.B	Liquid Effluents
3/4.8.E (Dresden) 3/4.8.D (Quad Cities)	Radiological Environmental Monitoring Program
3/4.8.F (Dresden) 3/4.8.E (Quad Cities)	Solid Radioactive Waste

These procedural details that have been removed from the TS are not required by the Commission's regulations to be included in the TS. They have been

prepared for incorporation in the ODCM or PCP upon issuance of this license amendment and may be subsequently changed by the licensee in accordance with 10 CFR 50.59. The staff has concluded that relocation of RETS is acceptable because (1) their inclusion in TS is not specifically required by 10 CFR 50.36 or other regulations, (2) RETS are not required to avert an immediate threat to the public health and safety, and (3) changes that are deemed to involve an unreviewed safety question will require prior NRC approval in accordance with 10 CFR 50.59(c). The staff has determined that the requirements for these systems are not required to be in the TS under 10 CFR 50.36 or Section 182a of the Atomic Energy Act. Further, they do not fall within any of the four criteria discussed in Section 2.0, above. In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.59. Because the requirements provide design details or function more appropriately controlled outside of the TS, the NRC staff finds the relocation of these details acceptable.

The following TS have been retained in the TS in accordance with the guidance of GL 89-01. CTS 3/4.8.A.5 has been relocated to proposed TS 3/4.8.H, "Offgas Explosive Mixture," and 3/4.2.H, "Explosive Gas Monitoring." CTS 3/4.8.A.7 has been relocated to proposed TS 3/4.8.I, "Offgas Activity." Current 3/4.8.D for Dresden has been relocated to proposed TS 3/4.8.J, "Liquid Holdup Tanks." The retained TS Sections have been formatted in accordance with the STS guidelines as modified by GL 89-01. The retained TS have incorporated the CTS requirements for each of the Sections and are, therefore, acceptable.

3.9 TS 3/4.8.J: Safe Shutdown Make-up Pumps (SSMP) (Quad Cities)

The proposed TS 3/4.8.J, "Safe Shutdown Make-up Pumps," is a new TS for Quad Cities. The TS will assure the operability and testing of the Safe Shutdown Make-up Pump. The pumps are necessary to meet the requirements of 10 CFR Part 50, Appendix R, for Fire Protection. The TS have been formatted in accordance with GL 81-12 requirements and the STS guidelines.

3.9.1 LCO

The proposed LCO ensures that appropriate controls are included within the TSs for the SSMP system. The SSMP system provides a common backup to the Unit 1 and 2 reactor core isolation cooling (RCIC) systems to satisfy the requirements of 10 CFR 50, Appendix R, Section III.G, "Fire Protection of Safe Shutdown Capability." The proposed LCO requires that the SSMP be maintained operable. Because the proposed new LCO ensures that appropriate controls are maintained for the SSMP at Quad Cities, and enhances the CTS, the staff finds the proposed LCO for TS 3.8.J acceptable.

3.9.2 Applicability

The SSMP system is required to be OPERABLE when either Unit 1 or Unit 2 is in OPERATIONAL MODE(s) 1, 2 or 3 with reactor steam dome pressure greater than 150 psig. The SSMP fulfills the same makeup function as the RCIC performs. The SSMP is required if the RCIC becomes disabled during a fire. As such, the

proposed TS requirements are comparable, where applicable, to the TSs for the RCIC system. The proposed applicability for the SSMP system is consistent with the Applicability for RCIC as discussed in TS 3/4.5.D. Because the proposed requirements ensures that appropriate controls are maintained for the SSMP at Quad Cities, the staff finds the proposed Applicability Statements for TS 3.8.J acceptable.

3.9.3 Required Actions

With the SSMP system inoperable, a 67-day allowable out-of-service is provided to restore the inoperable system to OPERABLE status before the Unit(s) must be shut down. The proposed AOT is consistent with Fire Protection Plan Documentation Package (FPPDP), "Fire Protection Reports," Volume 2, Tab 4, Safe Shutdown Analysis for Quad Cities and the guidelines of GL 81-12; therefore, the staff finds the proposed required action for TS 3.8.J acceptable.

3.9.4 Surveillance Requirements

The proposed SRs are new requirements and provide adequate assurance that the SSMP system will be OPERABLE when required. The SSMP fulfills the same safety function as the RCIC system in the event of a fire. As such the proposed TS requirements are comparable, where applicable, to the TS for the RCIC system. The proposed monthly verification of valve line-ups provides increased assurance that the SSMP system will be operationally ready and is consistent with similar SRs for RCIC as discussed in TS 3/4.5.D. The proposed quarterly verification of pump flow is consistent with the plant IST program. A design flow test can be performed during plant operation using a full flow test return line to the CCSW. Therefore, the staff finds the proposed SR for TS 4.8.J acceptable.

3.9.5 Conclusion

Based on the above evaluation, the staff finds that proposed TS 3/4.8.J, "Safe Shutdown Make-up Pumps," for Quad Cities has adopted the guidelines of the STS. The proposed TS add new requirements for Quad Cities. Therefore, the staff finds proposed TS Section 3/4.8.J acceptable.

3.10 Open Items

The following issues will remain open pending their resolution in the clean-up amendment.

1. TS 3.8.D, ACTION 1 - the AOT should be revised from 14 days to 7 days.

2. Add TS requirements for the Control Room Filtration and Air Conditioning System.

3. TS 4.8.D.4 - the service usage testing requirements must be justified or revised.

4.0 SUMMARY

The proposed TS for Section 3/4.8, "Plant Systems," will be clearer and easier to use as a result of the adaptation of the STS format. The changes result 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 CTS. Therefore, the staff finds the proposed TS changes acceptable.

5.0 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.

6.0 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 SRs. 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 (60 FR 37086). 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.

7.0 CONCLUSION

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

Principal Contributors: J. Stang/D. Skay

Date: December 19, 1995