



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

Docket File

50-237/249/254
265

April 2, 1996

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 6.0
(TAC NOS. M93407, M93408, M93686, AND M93687)

Dear Mr. Farrar:

The Commission has issued the enclosed Amendment No. 149 to Facility Operating License No. DPR-19 and Amendment No. 143 to Facility Operating License No. DPR-25 for the Dresden Nuclear Power Station, Units 2 and 3, respectively; and Amendment No. 170 to Facility Operating License No. DPR-29 and Amendment No. 166 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 applications dated September 1, 1995, for Dresden and September 20, 1995, for Quad Cities. The September 20, 1995, application superseded the Technical Specification Upgrade Program (TSUP), Section 6, portion of your October 2, 1991, application.

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 TSUP for both Dresden and Quad Cities. The licensee evaluated the current TS 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

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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 applications dated September 1, 1995, and September 20, 1995, contain the proposed upgrade of Section 6.0 (Administrative Controls) 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 current TS.

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.

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. 149 to DPR-19
- 2. Amendment No. 143 to DPR-25
- 3. Amendment No. 170 to DPR-29
- 4. Amendment No. 166 to DPR-30
- 5. Safety Evaluation

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cc w/encls: see next page

DOCUMENT NAME: DRESDEN\DRQ93407.AMD

** see previous page for concurrence*

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| OFFICE | LA:PD3-2 | PM:PD3-2 | PM:PD3-2 | PM:PD3-2 | BC:HQMB | BC:HHFB |
| NAME | C Moore | DSkay | JStang | RPulsifer | SBlack* | CThomas |
| DATE | 10/24/95 | 10/20/95 | 10/20/95 | 10/27/95 | 10/21/95 | 10/19/95 |

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|--------|----------|----------|-----------------|
| OFFICE | D:PD3-2 | OGC | BC:SP1B #132551 |
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| DATE | 08/29/96 | 10/20/95 | 11/28/95 |

D. L. Farrar
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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. 149
License No. DPR-19

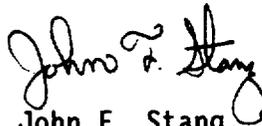
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated September 1, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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. 149, 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: April 2, 1996



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. 143
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 1, 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., and by deleting paragraphs 3.I. and 3.K. of Facility Operating License No. DPR-25* and is hereby amended to read as follows:

*Page 5 is attached, for convenience, for the composite license to reflect this change.

B. Technical Specifications

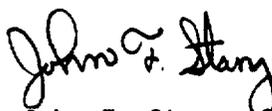
The Technical Specifications contained in Appendix A, as revised through Amendment No. 143, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

I. Deleted.

K. Deleted.

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

Attachments:

1. License page 5
2. Changes to the Technical Specifications

Date of Issuance: April 2, 1996

- H. Deleted [per Amendment 95].
 - I. Deleted.
 - J. Deleted [per Amendment 49].
 - K. Deleted.
 - L. Deleted [per Amendment 87].
 - M. Deleted.
4. This license is effective as of the date of issuance and shall expire at Mid-night January 12, 2011. [Amendment Nos. 2, 106.]

FOR THE ATOMIC ENERGY COMMISSION

Original Signed by

Peter A. Morris, Director
Division of Reactor Licensing

Enclosures:
Appendix A - Technical Specifications

Date of Issuance, January 12, 1971

ATTACHMENT TO LICENSE AMENDMENT NOS. 149 AND 143

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.

| <u>UNIT 2</u> <u>REMOVE</u> | <u>UNIT 3</u> <u>REMOVE</u> | <u>INSERT</u> |
|--------------------------------|--------------------------------|---------------|
| 6-1 | 6-1 | 6-1 |
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ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

- 6.1.A The Station Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.
- 6.1.B The Shift Manager shall be responsible for directing and commanding the safe overall operation of the facility under all conditions.

ADMINISTRATIVE CONTROLS

6.2 ORGANIZATION**6.2.A Onsite and Offsite Organizations**

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.

1. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the Quality Assurance Manual.
2. The Station Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
3. The Chief Nuclear Officer (CNO) shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
4. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

ADMINISTRATIVE CONTROLS

6.2.B Unit Staff

The unit staff shall include the following:

1. Three non-licensed operators shall be on site at all times.
2. At least one licensed Reactor Operator shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE(s) 1, 2, 3 or 4 at least one licensed Senior Reactor Operator shall be present in the control room.
3. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 6.2.B.1 and 6.2.C for a period of time not to exceed two hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
4. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than two hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
5. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g, senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel.

The amount of overtime worked by unit staff members performing safety-related functions shall be limited in accordance with the NRC Policy Statement on working hours (Generic Letter 82-12). Any deviations from the guidelines of Generic Letter 82-12 shall be authorized in advance by the Station Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

6. The Operations Manager or Shift Operations Supervisor shall hold a Senior Reactor Operator License.

6.2.C Shift Technical Advisor

The Shift Technical Advisor (STA) shall provide technical advisory support to the Unit Supervisor in the areas of thermal hydraulics, reactor engineering and plant analysis with regard to the safe operation of the facility. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift. A single STA may fulfill this function for both units.

ADMINISTRATIVE CONTROLS

6.3 UNIT STAFF QUALIFICATIONS

Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971, "Selection and Training of Nuclear Plant Personnel", dated March 8, 1971, except for the Radiation Protection Manager, who shall meet or exceed the qualifications of the Radiation Protection Manager as specified in Regulatory Guide 1.8, September 1975, and the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response and analysis of the plant for transients and accidents.

ADMINISTRATIVE CONTROLS

6.4 TRAINING

A retraining and replacement program for the unit staff shall be maintained under the direction of the appropriate on site manager. Training shall be in accordance with ANSI N18.1-1971 and 10 CFR 55 for appropriate designated positions and shall include familiarization with relevant industry operational experience.

ADMINISTRATIVE CONTROLS

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ADMINISTRATIVE CONTROLS

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ADMINISTRATIVE CONTROLS

6.7 SAFETY LIMIT VIOLATION

6.7.A The following actions shall be taken in the event a Safety Limit is violated:

1. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Site Vice-President or his designated alternate shall be notified within 24 hours;
2. Within 30 days, a Licensee Event Report (LER) shall be prepared documenting the event pursuant to 10 CFR 50.73. The LER shall be submitted to the NRC.
3. Critical operation of the Unit shall not be resumed until authorized by the Commission.

ADMINISTRATIVE CONTROLS

6.8 PROCEDURES AND PROGRAMS

6.8.A Written procedures shall be established, implemented, and maintained covering the activities referenced below:

1. The applicable procedures recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978,
2. The Emergency Operating Procedures required to implement the requirements of NUREG-0737 and Supplement 1 to NUREG-0737 as stated in Section 7.1 of Generic Letter No. 82-33,
3. Station Security Plan implementation,
4. Generating Station Emergency Response Plan implementation,
5. PROCESS CONTROL PROGRAM (PCP) implementation,
6. OFFSITE DOSE CALCULATION MANUAL (ODCM) implementation, and
7. Fire Protection Program implementation.

6.8.B The following programs shall be established, implemented, and maintained:

1. Reactor Coolant Sources Outside Primary Containment

This program provides controls to minimize leakage from those portions of systems outside primary containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include CS, HPCI, LPCI, IC, process sampling, containment monitoring, and standby gas treatment systems. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements, and
- b. Leak test requirements for each system at a frequency of at least once per operating cycle.

ADMINISTRATIVE CONTROLS

2. In-Plant Radiation Monitoring

This program provides controls which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- a. Training of personnel,
- b. Procedures for monitoring, and
- c. Provisions for maintenance of sampling and analysis equipment.

3. Post Accident Sampling

This program provides controls which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and primary containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel,
- b. Procedures for sampling and analysis,
- c. Provisions for maintenance of sampling and analysis equipment.

ADMINISTRATIVE CONTROLS

4. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC^{(a)(b)(c)(d)(e)} from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by station procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,
- b. Limitations on the instantaneous concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to ten (10) times the concentration values in 10 CFR Part 20, Appendix B, Table 2, Column 2 to 10 CFR Part 20.1001 - 20.2402,
- c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM,
- d. Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each Unit conforming to Appendix I to 10 CFR Part 50,
- e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,

-
- a. A MEMBER OF THE PUBLIC shall be an individual in a CONTROLLED or UNRESTRICTED AREA. An individual is not a MEMBER OF THE PUBLIC during any period in which the individual receives an occupational dose.
 - b. The CONTROLLED AREA shall be an area, outside of a RESTRICTED AREA but inside the SITE BOUNDARY, access to which can be limited by the licensee for any reason.
 - c. An UNRESTRICTED AREA shall be any area, access to which is neither limited nor controlled by the licensee.
 - d. RESTRICTED AREA shall be an area, access to which is limited by the licensee for the purpose of protecting individuals against undue risks from exposure to radiation and radioactive materials. RESTRICTED AREA(s) do not include areas used as residential quarters, but separate rooms in a residential building may be set apart as a RESTRICTED AREA.
 - e. The SITE BOUNDARY shall be that line beyond which the land is neither owned, nor leased, nor otherwise controlled by the licensee.

ADMINISTRATIVE CONTROLS

- f. Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose conforming to Appendix I to 10 CFR Part 50,
- g. Limitations on the dose rate resulting from radioactive materials released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY shall be limited to the following:
 - a) For noble gases: less than or equal to a dose rate of 500 mrem/yr to the whole body and less than or equal to a dose rate of 3000 mrem/yr to the skin, and
 - b) For Iodine-131, Iodine-133, tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: less than or equal to a dose rate of 1500 mrem/yr to any organ.
- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each Unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
- i. Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each Unit conforming to Appendix I to 10 CFR Part 50,
- j. Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

ADMINISTRATIVE CONTROLS

5. Primary Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the primary containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemption. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Testing Program," dated September 1995.

The peak calculated primary containment internal pressure for the design basis loss of coolant accident, P_s , is 48 psig.

The maximum allowable primary containment leakage rate, L_s , at P_s , is 1.6% of primary containment air weight per day.

Leakage rate acceptance criteria are:

- a. Primary containment overall leakage rate acceptance criterion is $\leq 1.0 L_s$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $\leq 0.60 L_s$ for the combined Type B and Type C tests, and $\leq 0.75 L_s$ for Type A tests.
- b. Air lock testing acceptance criteria is the overall air lock leakage rate is $\leq 0.05 L_s$ when tested at $\geq P_s$.

The provisions of 4.0.B do not apply to the test frequencies specified in the Primary Containment Leakage Rate Testing Program.

The provisions of 4.0.C are applicable to the Primary Containment Leakage Rate Testing Program.

ADMINISTRATIVE CONTROLS

6.9 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Regional Administrator of the appropriate Regional Office of the NRC unless otherwise noted.

6.9.A. Routine Reports

1. Deleted

2. Annual Report

Annual reports covering the activities of the Unit for the previous calendar year, as described in this section shall be submitted prior to March 1 of each year.

The reports required shall include:

- a. Tabulation of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/year and their associated person rem exposure according to work and job functions, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignments to various duty functions may be estimated based on pocket dosimeter or TLD. Small exposures totaling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions.

- b. The results of specific activity analysis in which the reactor coolant exceeded the limits of Specification 3.6.J. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; (2) results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than the limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Clean-up system flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Graph of the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady-state level; and (5) The time duration when the specific activity of the reactor coolant exceeded the radioiodine limit.

ADMINISTRATIVE CONTROLS

3. Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the operation of the Unit during the previous calendar year shall be submitted prior to May 1 of each year. The report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

4. Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the facility during the previous calendar year shall be submitted prior to April 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the facility. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

5. Monthly Operating Report

Routine reports of operating statistics and shutdown experience, including documentation of all challenges to safety valves or safety/relief valves, shall be submitted on a monthly basis to the Director, Office of Resource Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator of the NRC Regional Office, no later than the 15th of each month following the calendar month covered by the report.

6. CORE OPERATING LIMITS REPORT

- a. Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following:
 - (1) The Control Rod Withdrawal Block Instrumentation for Table 3.2.E-1 of Specification 3.2.E.
 - (2) The Average Planar Linear Heat Generation Rate (APLHGR) Limit for Specification 3.11.A.
 - (3) The Local Steady State Linear Heat Generation Rate (LHGR) for Specification 3.11.D.
 - (4) The Minimum Critical Power Operating Limit (including 20% scram insertion time) for Specification 3.11.C. This includes rated and off-rated flow conditions.

ADMINISTRATIVE CONTROLS

- b. The analytical methods used to determine the operating limits shall be those previously reviewed and approved by the NRC in the latest approved revision or supplement of topical reports:
- (1) ANF-1125(P)(A), "Critical Power Correlation - ANFB."
 - (2) ANF-524(P)(A), "ANF Critical Power Methodology for Boiling Water Reactors."
 - (3) XN-NF-79-71(P)(A), "Exxon Nuclear Plant Transient Methodology for Boiling Water Reactors."
 - (4) XN-NF-80-19(P)(A), "Exxon Nuclear Methodology for Boiling Water Reactors."
 - (5) XN-NF-85-67(P)(A), "Generic Mechanical Design for Exxon Nuclear Jet Pump Boiling Water Reactors Reload Fuel."
 - (6) XN-NF-81-22(P)(A), "Generic Statistical Uncertainty Analysis Methodology."
 - (7) ANF-913(P)(A), "CONTRANSA2: A Computer Program for Boiling Water Reactor Transient Analysis."
 - (8) Commonwealth Edison Company Topical Report NFSR-0091, "Benchmark of CASMO/MICROBURN BWR Nuclear Design Methods", and associated Supplements on Neutronics Licensing Analyses (Supplement 1) and La Salle County Unit 2 Benchmarking (Supplement 2).
- c. The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met. The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

6.9.B Special Reports

Special reports shall be submitted to the Regional Administrator of the NRC Regional Office within the time period specified for each report.

ADMINISTRATIVE CONTROLS

6.10 [INTENTIONALLY LEFT BLANK]

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ADMINISTRATIVE CONTROLS

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

ADMINISTRATIVE CONTROLS

6.12 HIGH RADIATION AREA

6.12.A Pursuant to 10 CFR 20.1601(c), in lieu of the requirements of paragraph 20.1601 of 10 CFR Part 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr at 30 cm (12 in.) shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP)^(f) (or equivalent document). Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

1. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
2. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them; or
3. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the RWP (or equivalent document).

f Health Physics personnel or personnel escorted by health physics personnel shall be exempt from the RWP issuance requirements during the performance of their assigned radiation protection duties, provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.

ADMINISTRATIVE CONTROLS

- 6.12.B** In addition to the requirements of 6.12.A, areas accessible to personnel with radiation levels greater than 1000 mrem/hr at 30 cm (12 in.) from the radiation source or from any surface which the radiation penetrates shall require the following:
1. Doors shall be locked to prevent unauthorized entry and shall not prevent individuals from leaving the area. In place of locking the door, continuous, direct or electronic surveillance that is capable of preventing unauthorized entry may be used. The keys shall be maintained under the administrative control of the Shift Manager on duty and/or health physics supervision.
 2. Personnel access and exposure control requirements of activities being performed within these areas shall be specified by an approved RWP(or equivalent document).
 3. Each person entering the area shall be provided with an alarming radiation monitoring device that continuously integrates the radiation dose rate (such as an electronic dosimeter.) Continuous surveillance and radiation monitoring by a Radiation Protection Technician may be substituted for an alarming dosimeter.
 4. [THIS ITEM INTENTIONALLY LEFT BLANK].
 5. For individual HIGH RADIATION AREAS accessible to personnel with radiation levels of greater than 1000 mrem/h at 30 cm (12 in.) that are located within large areas where no enclosure exists for purposes of locking, and where no enclosure can be reasonably constructed around the individual areas, then such individual areas shall be barricaded, conspicuously posted, and a flashing light shall be activated as a warning device.

ADMINISTRATIVE CONTROLS

6.13 PROCESS CONTROL PROGRAM (PCP)**6.13.A Changes to the PCP:**

1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and,
 - b. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.

2. [THIS ITEM INTENTIONALLY LEFT BLANK].

ADMINISTRATIVE CONTROLS

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)**6.14.A Changes to the ODCM:**

1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and,
 - b. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
2. [THIS ITEM INTENTIONALLY LEFT BLANK].
3. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Report for the period of the report in which any change to the ODCM was made effective. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.



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. 170
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 20, 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., and by deleting paragraphs 3.G., 3.J. and 3.L. of Facility Operating License No. DPR-29* and is hereby amended to read as follows:

*Page 5 is attached, for convenience, for the composite license to reflect this change.

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 170, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

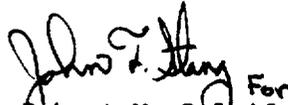
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J. Deleted.

L. Deleted.

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



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

Attachments:

1. License page 5
2. Changes to the Technical Specifications

Date of Issuance: April 2, 1996

with revisions submitted through July 15, 1992. Changes made in accordance with 10 CFR 73.55, shall be implemented in accordance with the schedule set forth therein.

- F. Commonwealth Edison Company shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility and as approved in the Safety Evaluation Reports dated July 27, 1979 with supplements dated November 5, 1980 and February 12, 1981; December 30, 1982; December 1, 1987 with supplement dated April 20, 1988; December 11, 1987 with supplement dated July 21, 1988; and February 25, 1991, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- G. Deleted.
- H. Deleted by incorporation into 3.E above, per Amendment No. 64 dated March 19, 1981.
- I. (OPEN)
- J. Deleted.
- K. Deleted by Amendment No. 103 dated December 15, 1987.
- L. Deleted.
4. This license is effective as of the date of issuance, and shall expire at midnight, December 14, 2012.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Enclosures: Appendixes A and B--
Technical Specifications

Amendment No. ~~141~~, ~~150~~, 170



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. 166
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 20, 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., and by deleting paragraphs 3.H., 3.I. and 3.K. of Facility Operating License No. DPR-30* and is hereby amended to read as follows:

*Page 5 is attached, for convenience, for the composite license to reflect this change.

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.

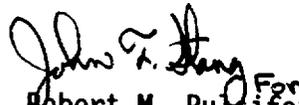
H. Deleted.

I. Deleted.

K. Deleted.

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



For
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: April 2, 1996

with revisions submitted through July 15, 1992. Changes made in accordance with 10 CFR 73.55, shall be implemented in accordance with the schedule set forth therein.

- F. Commonwealth Edison Company shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility and as approved in the Safety Evaluation Reports dated July 27, 1979 with supplements dated November 5, 1980 and February 12, 1981; December 30, 1982; December 1, 1987 with supplement dated April 20, 1988; December 11, 1987 with supplement dated July 21, 1988; and February 25, 1991, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- G. Deleted by incorporation into 3.E above, per Amendment No. dated March 19, 1981.
- H. Deleted.
- I. Deleted.
- J. Deleted
- K. Deleted.
4. This license is effective as of the date of issuance, and shall expire at midnight, December 14, 2012.

FOR THE ATOMIC ENERGY COMMISSION

Original signed by:

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Enclosures: Appendices A and B -- Technical Specifications

Date of Issuance: December 14, 1972

ATTACHMENT TO LICENSE AMENDMENT NOS. 170 AND 166

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.

| <u>UNIT 1</u> <u>REMOVE</u> | <u>UNIT 2</u> <u>REMOVE</u> | <u>INSERT</u> |
|--------------------------------|--------------------------------|---------------|
| 6.1-1 | 6.1-1 | 6-1 |
| 6.1-2 | 6.1-2 | 6-2 |
| 6.1-3 | 6.1-3 | 6-3 |
| 6.1-4 | 6.1-4 | 6-4 |
| 6.1-5 | 6.1-5 | 6-5 |
| 6.1-6 | 6.1-6 | 6-6 |
| 6.1-7 | 6.1-7 | 6-7 |
| 6.1-8 | 6.1-8 | 6-8 |
| 6.1-9 | 6.1-9 | 6-9 |
| 6.1-10 | 6.1-10 | 6-10 |
| 6.1-11 | 6.1-11 | 6-11 |
| Figure 6.1-3 | Figure 6.1-3 | 6-12 |
| - | - | 6-12a |
| 6.2-1 | 6.2-1 | 6-13 |
| 6.2-2 | 6.2-2 | 6-14 |
| 6.2-3 | 6.2-3 | 6-15 |
| 6.3-1 | 6.3-1 | 6-16 |
| 6.4-1 | 6.4-1 | 6-17 |
| 6.5-1 | 6.5-1 | 6-18 |
| 6.5-2 | 6.6-1 | 6-19 |
| 6.6-1 | 6.6-2 | 6-20 |
| 6.6-2 | 6.6-2a | 6-21 |
| 6.6-3 | 6.6-3 | 6-22 |
| 6.6-4 | 6.6-4 | --- |
| 6.6-5 | 6.6-5 | --- |
| 6.6-6 | 6.7-1 | --- |
| 6.7-1 | 6.8-1 | --- |
| 6.8-1 | 6.9-1 | --- |
| 6.9-1 | 6.10-1 | --- |
| 6.10-1 | 6.11-1 | --- |
| 6.11-1 | 6.12-1 | --- |
| 6.12-1 | --- | --- |

ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

- 6.1.A The Station Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.
- 6.1.B The Shift Engineer shall be responsible for directing and commanding the safe overall operation of the facility under all conditions.

ADMINISTRATIVE CONTROLS

6.2 ORGANIZATION**6.2.A Onsite and Offsite Organizations**

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.

1. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the Quality Assurance Manual.
2. The Station Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
3. The Chief Nuclear Officer (CNO) shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
4. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

ADMINISTRATIVE CONTROLS

6.2.B Unit Staff

The unit staff shall include the following:

1. Three non-licensed operators shall be on site at all times.
2. At least one licensed Reactor Operator shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE(s) 1, 2, 3 or 4, at least one licensed Senior Reactor Operator shall be present in the control room.
3. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 6.2.B.1 and 6.2.C for a period of time not to exceed two hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
4. A Radiation Protection Technician shall be on site when fuel is in the reactor. The position may be vacant for not more than two hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
5. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g, senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel.

The amount of overtime worked by unit staff members performing safety-related functions shall be limited in accordance with the NRC Policy Statement on working hours (Generic Letter 82-12).

6. The Operations Manager or Shift Operations Supervisor shall hold a Senior Reactor Operator License.

6.2.C Shift Technical Advisor

The Shift Technical Advisor (STA) shall provide technical advisory support to the Unit Supervisor in the areas of thermal hydraulics, reactor engineering and plant analysis with regard to the safe operation of the facility. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift. A single STA may fulfill this function for both units.

ADMINISTRATIVE CONTROLS

6.3 UNIT STAFF QUALIFICATIONS

Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971, "Selection and Training of Nuclear Plant Personnel", dated March 8, 1971, except for the Rad/Chem Superintendent or Lead Health Physicist, who shall meet or exceed the qualifications of the Radiation Protection Manager as specified in Regulatory Guide 1.8, September 1975, and the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response and analysis of the plant for transients and accidents.

ADMINISTRATIVE CONTROLS

6.4 TRAINING

A retraining and replacement program for the unit staff shall be maintained under the direction of the appropriate on site manager. Training shall be in accordance with ANSI N18.1-1971 and 10 CFR 55 for appropriate designated positions and shall include familiarization with relevant industry operational experience.

ADMINISTRATIVE CONTROLS

6.5 [INTENTIONALLY LEFT BLANK]

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ADMINISTRATIVE CONTROLS

6.6 [INTENTIONALLY LEFT BLANK]

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ADMINISTRATIVE CONTROLS

6.7 SAFETY LIMIT VIOLATION

6.7.A The following actions shall be taken in the event a Safety Limit is violated:

1. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Site Vice-President or his designated alternate shall be notified within 24 hours.
2. Within 30 days, a Licensee Event Report (LER) shall be prepared documenting the event pursuant to 10 CFR 50.73. The LER shall be submitted to the NRC.
3. Critical operation of the Unit shall not be resumed until authorized by the Commission.

ADMINISTRATIVE CONTROLS

6.8 PROCEDURES AND PROGRAMS

6.8.A Written procedures shall be established, implemented, and maintained covering the activities referenced below:

1. The applicable procedures recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978,
2. The Emergency Operating Procedures required to implement the requirements of NUREG-0737 and Supplement 1 to NUREG-0737 as stated in Section 7.1 of Generic Letter No. 82-33,
3. Station Security Plan implementation,
4. Generating Station Emergency Response Plan implementation,
5. PROCESS CONTROL PROGRAM (PCP) implementation,
6. OFFSITE DOSE CALCULATION MANUAL (ODCM) implementation, and
7. Fire Protection Program implementation.

6.8.B Deleted

6.8.C Deleted

6.8.D The following programs shall be established, implemented, and maintained:

1. Reactor Coolant Sources Outside Primary Containment

This program provides controls to minimize leakage from those portions of systems outside primary containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include CS, HPCI, LPCI, RCIC, process sampling, containment monitoring, and standby gas treatment systems. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements, and
- b. Leak test requirements for each system at a frequency of at least once per operating cycle.

ADMINISTRATIVE CONTROLS

2. In-Plant Radiation Monitoring

This program provides controls which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- a. Training of personnel,
- b. Procedures for monitoring, and
- c. Provisions for maintenance of sampling and analysis equipment.

3. Post Accident Sampling

This program provides controls which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and primary containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel,
- b. Procedures for sampling and analysis,
- c. Provisions for maintenance of sampling and analysis equipment.

ADMINISTRATIVE CONTROLS

4. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC^{(a)(b)(c)(d)(e)} from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by station procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,
- b. Limitations on the instantaneous concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to ten (10) times the concentration values in 10 CFR Part 20, Appendix B, Table 2, Column 2 to 10 CFR Part 20.1001 - 20.2402,
- c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM,
- d. Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each Unit conforming to Appendix I to 10 CFR Part 50,
- e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,

-
- a. A MEMBER OF THE PUBLIC shall be an individual in a CONTROLLED or UNRESTRICTED AREA. An individual is not a MEMBER OF THE PUBLIC during any period in which the individual receives an occupational dose.
 - b. The CONTROLLED AREA shall be an area, outside of a RESTRICTED AREA but inside the SITE BOUNDARY, access to which can be limited by the licensee for any reason.
 - c. An UNRESTRICTED AREA shall be any area, access to which is neither limited nor controlled by the licensee.
 - d. RESTRICTED AREA shall be an area, access to which is limited by the licensee for the purpose of protecting individuals against undue risks from exposure to radiation and radioactive materials. RESTRICTED AREA(s) do not include areas used as residential quarters, but separate rooms in a residential building may be set apart as a RESTRICTED AREA.

The SITE BOUNDARY shall be that line beyond which the land is neither owned, nor leased, nor otherwise controlled by the licensee.

ADMINISTRATIVE CONTROLS

- f. Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose conforming to Appendix I to 10 CFR Part 50,
- g. Limitations on the dose rate resulting from radioactive materials released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY shall be limited to the following:
 - a) For noble gases: less than or equal to a dose rate of 500 mrem/yr to the whole body and less than or equal to a dose rate of 3000 mrem/yr to the skin, and
 - b) For Iodine-131, Iodine-133, tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: less than or equal to a dose rate of 1500 mrem/yr to any organ.
- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each Unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
- i. Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each Unit conforming to Appendix I to 10 CFR Part 50,
- j. Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

ADMINISTRATIVE CONTROLS

5. Primary Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the primary containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemption. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Testing Program," dated September 1995.

The peak calculated primary containment internal pressure for the design basis loss of coolant accident, P_s , is 48 psig.

The maximum allowable primary containment leakage rate, L_s , at P_s , is 1% of primary containment air weight per day.

Leakage rate acceptance criteria are:

- a. Primary containment overall leakage rate acceptance criterion is $\leq 1.0 L_s$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $\leq 0.60 L_s$ for the combined Type B and Type C tests, and $\leq 0.75 L_s$ for Type A tests.
- b. Air lock testing acceptance criteria is the overall air lock leakage rate is $\leq 0.05 L_s$ when tested at $\geq P_s$.

The provisions of 4.0.B do not apply to the test frequencies specified in the Primary Containment Leakage Rate Testing Program.

The provisions of 4.0.C are applicable to the Primary Containment Leakage Rate Testing Program.

ADMINISTRATIVE CONTROLS

6.9 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Regional Administrator of the appropriate Regional Office of the NRC unless otherwise noted.

6.9.A. Routine Reports

1. Deleted
2. Annual Report

Annual reports covering the activities of the Unit for the previous calendar year, as described in this section shall be submitted prior to March 1 of each year.

ADMINISTRATIVE CONTROLS

The reports required shall include:

- a. Tabulation of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/year and their associated person rem exposure according to work and job functions, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignments to various duty functions may be estimated based on pocket dosimeter or TLD. Small exposures totaling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions.
- b. The results of specific activity analysis in which the reactor coolant exceeded the limits of Specification 3.6.J. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; (2) results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than the limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Clean-up system flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Graph of the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady-state level; and (5) The time duration when the specific activity of the reactor coolant exceeded the radioiodine limit.

3. **Annual Radiological Environmental Operating Report**

The Annual Radiological Environmental Operating Report covering the operation of the Unit during the previous calendar year shall be submitted prior to May 1 of each year. The report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

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4. Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the facility during the previous calendar year shall be submitted prior to April 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the facility. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

5. Monthly Operating Report

Routine reports of operating statistics and shutdown experience, including documentation of all challenges to safety valves or safety/relief valves, shall be submitted on a monthly basis to the Director, Office of Resource Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator of the NRC Regional Office, no later than the 15th of each month following the calendar month covered by the report.

6. CORE OPERATING LIMITS REPORT

- a. Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following:
 - (1) The Control Rod Withdrawal Block Instrumentation for Table 3.2.E-1 of Specification 3.2.E.
 - (2) The Average Planar Linear Heat Generation Rate (APLHGR) Limit for Specification 3.11.A.
 - (3) The Linear Heat Generation Rate (LHGR) for Specification 3.11.D.
 - (4) The Minimum Critical Power Operating Limit (including 20% scram insertion time) for Specification 3.11.C. This includes rated and off-rated flow conditions.
- b. The analytical methods used to determine the operating limits shall be those previously reviewed and approved by the NRC in the latest approved revision or supplement of topical reports:
 - (1) NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel," (latest approved revision).
 - (2) Commonwealth Edison Topical Report NFSR-0085, "Benchmark of BWR Nuclear Design Methods," (latest approved revision).

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- (3) Commonwealth Edison Topical Report NFSR-0085, Supplement 1, "Benchmark of BWR Nuclear Design Methods - Quad Cities Gamma Scan Comparisons," (latest approved revision).
 - (4) Commonwealth Edison Topical Report NFSR-0085, Supplement 2, "Benchmark of BWR Nuclear Design Methods - Neutronic Licensing Analyses," (latest approved revision).
- c. The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met. The **CORE OPERATING LIMITS REPORT**, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

6.9.B Special Reports

Special reports shall be submitted to the Regional Administrator of the NRC Regional Office within the time period specified for each report.

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6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

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6.12 HIGH RADIATION AREA

6.12.A Pursuant to 10 CFR 20.1601(c), in lieu of the requirements of paragraph 20.1601 of 10 CFR Part 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr at 30 cm (12 in.) shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP)^f (or equivalent document). Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

1. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
2. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them; or
3. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the RWP (or equivalent document).

6.12.B In addition to the requirements of 6.12.A, above, areas accessible to personnel with radiation levels greater than 1000 mrem/hr at 30 cm (12 in.) from the radiation source or from any surface which the radiation penetrates shall require the following:

1. Doors shall be locked to prevent unauthorized entry and shall not prevent individuals from leaving the area. In place of locking the door, direct or electronic surveillance that is capable of preventing unauthorized entry may be used. The keys shall be maintained under the administrative control of the Shift Engineer on duty and/or health physics supervision.
2. Personnel access and exposure control requirements of activities being performed within these areas shall be specified by an approved RWP (or equivalent document).

f Health Physics personnel or personnel escorted by health physics personnel shall be exempt from the RWP issuance requirements during the performance of their assigned radiation protection duties, provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.

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6.13 PROCESS CONTROL PROGRAM (PCP)**6.13.A Changes to the PCP:**

1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and,
 - b. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
2. [THIS ITEM INTENTIONALLY LEFT BLANK].

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6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)**6.14.A Changes to the ODCM:**

1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and,
 - b. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
2. [THIS ITEM INTENTIONALLY LEFT BLANK].
3. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Report for the period of the report in which any change to the ODCM was made effective. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-19,
AMENDMENT NO. 143 TO FACILITY OPERATING LICENSE NO. DPR-25,
AMENDMENT NO. 170 TO FACILITY OPERATING LICENSE NO. DPR-29,
AND AMENDMENT NO. 166 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

Commonwealth Edison Company (ComEd, the licensee) submitted an amendment requesting to upgrade sections of the Technical Specifications (TS) for the Dresden Nuclear Power Station, Units 2 and 3, on September 1, 1995, and the Quad Cities Nuclear Power Station, Units 1 and 2, on September 20, 1995. 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 TS 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 applications dated September 1, 1995, and September 20, 1995, proposed to upgrade only those sections of the TS to be included in TSUP Section 6.0 (Administrative Controls) 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 current TS. 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 current TS 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 Limiting Condition for Operations (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 current TS 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 current TS 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 current TS 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 current TS 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 current TS 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 current TS 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. These four criteria have been incorporated into 10 CFR 50.36.

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

3.0 EVALUATION OF PROPOSED TS SECTION 6.0

The following sections provide the staff's evaluation of the TS changes reflected in proposed TS Section 6.0, "Administrative Controls." The format of the proposed TS is adopted from the Byron and Braidwood Nuclear Power Plants TS with the intention of making TS Section 6.0 consistent among all of ComEd's six nuclear stations. The proposed Dresden and Quad Cities TS utilize the Byron and Braidwood TS format because they follow the STS guidelines.

Some of the changes proposed by the applications dated September 1, 1995, and September 20, 1995, had previously been submitted to the NRC in an application dated April 24, 1995. The April 24, 1995 application, as supplemented by the August 1, 1995, and September 14, 1995, submittals proposed changes to Section 6.0 of the TS for all six ComEd nuclear stations. The proposed changes primarily involved relocation of some TS requirements from the TS in Section 6.0 and relocates the requirements in the ComEd Quality Assurance Program. These changes have been approved by the NRC by Amendment Nos. 163/159 for Quad Cities' TS and Amendment Nos. 141/135 for Dresden's TS.

The proposed TS are evaluated below.

3.1 Section 6.1, Responsibility

Proposed TS 6.1 is a new specification that has been formatted in accordance with the guidance of STS 6.1. The proposed TS provides clarification and enhanced guidance regarding the roles and responsibilities of site management - Station Manager being responsible for overall facility operation and the Shift Engineer [Shift Manager for Dresden] being responsible for directing/commanding overall facility operation. Plant-specific terminology regarding the titles of the individuals has been retained in proposed TS 6.1. The proposed TS is an enhancement of the Current Technical Specification (CTS) requirements. The proposed TS has been formatted in accordance with the STS guidelines and retained CTS requirements, therefore, the staff finds proposed TS Section 6.1 acceptable.

3.2 Section 6.2, Organization

Proposed TS 6.2.A retains the requirements of CTS 6.1.A. Proposed TS 6.2.A delineates the requirements for the onsite and offsite organizations for activities affecting the safety of the nuclear power plant. The current TS and proposed TS 6.2.A.1 contain a requirement that the controls for onsite and offsite organizational lines of authority shall be maintained in the Quality Assurance Manual. NRC review of Quality Assurance Programs is governed by 10 CFR 50.54. The organizational lines of authority and responsibilities are documented in the Quality Assurance Manual which will ensure that proposed changes to these requirements will receive appropriate regulatory oversight. Proposed TS 6.2.A.2 delineate the responsibilities of the Station Manager.

The current and proposed TS 6.2.A.3 delineate the responsibilities of the Chief Nuclear Officer (CNO). In addition, the current and proposed TS 6.2.A.4 delineate the responsibilities and site organizational boundaries of those members of the site staff who train site operating personnel, those members of the site health physics organizations and those members of the site quality assurance organizations. The proposed TS have retained the CTS requirements. Therefore, because the proposed requirements maintain CTS requirements, the staff finds the proposed TS acceptable.

Proposed TS 6.2.B provides the requirements regarding staffing levels for the plant's unit staff and is based upon the guidance of STS 6.2.2 and retains the requirements of CTS 6.1.C. Proposed TS 6.2.B.5 includes minor administrative changes from STS 6.2.2 regarding the titles of key personnel, to be consistent with current plant terminology. Proposed Dresden TS 6.2.B.5 includes a new provision which was added to provide guidance on authorizing deviations from the guidelines of GL 82-12, "Nuclear Power Plant Staff Working Hours" regarding overtime restrictions. Proposed TS 6.2.B.5 is based on the guidelines of STS 6.2.2.f. This provision is consistent with the guidelines of GL 82-12. The staff, therefore, finds the proposed TS acceptable.

CTS Table 6.1.1 for Dresden and Figure 6.1-3 for Quad Cities requirements have been retained in proposed TS 6.2.B. Proposed TS 6.2.B specifies requirements for the minimum number of licensed and unlicensed personnel that are required to be on-shift based on the operating status of the various units. The proposed TS are based on the guidance of NUREG-1433, Section 5.2.2. The current Dresden TS contain requirements based on the operating status of all three units. The current TS are based on Dresden, Unit 1, control room manning requirements at a time when Dresden Units 1, 2, and 3 shared a common control room. Dresden Unit 1 has been decommissioned and as a result, Unit 1 controls and alarms have been incorporated into the Unit 2/3 control room. The proposed TS reflect the number of required non-licensed operators consistent with a two unit site in accordance with 10 CFR 50.54(m). The staff finds the proposed TS change acceptable.

CTS Table 6.1.1 for Dresden and Figure 6.1-3 for Quad Cities also contain requirements for minimum licensed operator staffing levels during core alterations. These requirements are not specifically delineated in the proposed TS because these requirements are governed by the provisions specified by 10 CFR 50.54(m)(2)(iv). 10 CFR 50.54(m)(2)(iv) specifies that "Each licensee shall have present, during alteration of the core of a nuclear power unit (including fuel transfer or loading), a person holding a senior operator license or a senior operator license limited to fuel handling to directly supervise the activity and, during this time, the licensee shall not assign other duties to this person." As such, TS requirements for the minimum staffing levels during core alterations are redundant to the requirements specified within 10 CFR 50.54(m)(2)(iv) and may be deleted from the TS. The staff has determined that these 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. Therefore, the staff finds the proposed changes acceptable.

Proposed TS 6.2.B.1, 6.2.B.2 and 6.2.B.3 retain the CTS requirements for the number of licensed senior reactor operators and licensed reactor operators which are required to be on shift when neither, one, or both units are operating. The proposed TS reference 10 CFR 50.54 which specifies the number of licensed senior reactor operators and licensed reactor operators required to be on shift at nuclear power plants. Therefore, the staff finds the proposed TS acceptable.

Proposed TS 6.2.B.4 eliminates the ambiguities of the CTS associated with the applicable conditions for requiring a Radiation Protection Technician be on-site. The proposed TS is based on the guidance of NUREG-1433, Section 5.2.2. CTS Table 6.1.1 for Dresden and Figure 6.3-1 for Quad Cities is unclear regarding applicability and corresponding location of fuel within the nuclear units. Proposed TS 6.2.B.4 explicitly clarifies that the Radiation Protection Technician has to be on-site when fuel is in the reactor. The proposed TS is a clarification of CTS requirements, is consistent with the guidance of NUREG-1433 and, therefore, the staff finds the proposed change acceptable.

Proposed TS 6.2.B retains CTS requirement specifying that Field Supervisors and Fuel Handling Supervisors hold a Senior Operator License. The proposed requirements are consistent with the guidance specified in NUREG-1433, Section 5.2.2. The proposed TS reference the requirements specified in 10 CFR 50.54, which require Field Supervisors and Fuel Handling Supervisors to hold a Senior Operator License. Therefore, the staff finds the proposed TS is acceptable.

Proposed TS 6.2.B.6 provides the requirements regarding the license requirements for Senior Operation's Management. The proposed requirements ensure that the Operations Manager or Shift Engineer (Shift Operations Supervisor at Dresden) hold a Senior Reactor Operator license. The proposed requirements are consistent to the current TS requirements and, therefore, are acceptable.

Proposed TS 6.2.C contains additional requirements for the shift technical advisor (STA). These additional requirements and qualifications include engineering expertise on Shift. CTS Table 6.1.1 for Dresden and Figure 6.1.3 for Quad Cities included limited requirements for staffing of the STA position. Proposed TS 6.2.C is based upon the guidance of STS 6.2.4 and provides additional clarification regarding the qualifications and staffing requirements necessary to fulfill the STA function. Because the proposed changes expand CTS provisions and provide additional clarification regarding the qualification of individuals fulfilling the role of the STA, the staff finds the proposed change acceptable.

3.3 Section 6.3, Unit Staff Qualification

Proposed TS 6.3 retains the requirements of CTS 6.1.D which discuss the qualifications of the Technical Managers. These qualifications are specifically delineated for the unit staff in American National Standards Institute (ANSI) N18.1-1971. The proposed requirements are based upon the

guidance of STS 6.3. The proposed Dresden TS changes the title of the Health Physics Supervisor to Radiation Protection Manager and the proposed Quad Cities TS changes the title to Rad/Chem Superintendent. The Radiation Protection Manager or Rad/Chem Superintendent's qualifications are specifically delineated in Regulatory Guide 1.8, September 1975. The proposed TS have retained CTS requirement and have been formatted in accordance with the STS guidelines. Therefore, the staff finds the proposed TS acceptable.

CTS 6.1.D at Dresden and Quad Cities specifies the position of Technical Superintendent. However, the positions of Technical Superintendent no longer exists at Dresden or Quad Cities and the requirements have been deleted. The proposed change is administrative and therefore acceptable.

CTS 6.1.D for Quad Cities contain details regarding the training program for Radiation Protection Technicians which have not been retained in the proposed TS. Proposed TS 6.3 specifies that each member of the unit staff shall meet or exceed the minimum qualification of ANSI N18.1-1971. The proposed TS are consistent with the guidance of STS 6.3.1. The requirements specified in ANSI N18.1 suffice for defining the training requirements for site personnel and the specific procedural details regarding the training program are more appropriately contained in station procedures. In addition the training program is referenced in both the Dresden and Quad Cities UFSAR. Changes to the UFSAR are controlled by 10 CFR 50.59. The staff has determined that these 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. The staff, therefore, finds the proposed changes are acceptable.

3.4 Section 6.4, Training

Proposed TS 6.4 provides the requirements for the maintenance of a retraining and replacement program and is based on the guidance of STS 6.4. The proposed TS 6.4 specifies that retraining shall be in accordance with ANSI N18.1-1971. In addition, the proposed TS incorporates the requirements of CTS 6.1.E and adds the requirement that training be in accordance with 10 CFR Part 55. The proposed TS changes also specify that the training shall include relevant industry operational experience. The proposed changes maintain existing requirements and include additional requirements regarding 10 CFR Part 55 and familiarly with applicable operational experiences and are consistent with STS 6.4 guidelines. The staff finds the proposed changes acceptable.

CTS 6.1.E contains requirements regarding training of the fire brigade. These requirements have not been retained in the proposed TS. The proposed TS relocate the requirements for the fire brigade training and other fire protection administrative controls to the Fire Protection Program as described in the plants' UFSARs. Current licensee condition 2.E for Dresden, Unit 2; 3.G for Dresden, Unit 3; and 3.F for Quad Cities, Units 1 and 2, provide adequate control of these requirements. This control ensures that any changes made to the sites' fire protection programs that adversely affect the ability of the plant to achieve and maintain safe shutdown in the event of a fire

require NRC staff review and approval. As such, the current license conditions provide an equivalent level of oversight as the current Section 6.0 and are redundant. Because the relocation of these requirements to the UFSARs does not reduce the controls of existing requirements and the proposed change does not reduce existing plant fire protection requirements, the staff finds it acceptable. Further the staff has determined that these requirements are not required to be in the TS under 10 CFR 50.36 or Section 182a of the Atomic Energy Act. In addition, they do not fall within any of the four criteria discussed in Section 2.0, above. Therefore the proposed change is acceptable.

For continuity, it should be noted that proposed TS 6.5 and 6.6 were left as intentionally blank by the licensee. As such, no staff evaluation of proposed TS 6.5 and 6.6 is required.

3.5 Section 6.7, Safety Limit Violation

Proposed TS 6.7 is based on the guidance of STS 6.7 and maintains the requirements of CTS 6.4 with the following exception. CTS 6.4 requires the immediate shutdown of the reactor when a safety limit has been exceeded. This requirement has been relocated from proposed TS 6.0 to TSUP Section 2.0 which was approved by Amendment Nos. 134, 128, 155, and 151 to the Dresden and Quad Cities TS, respectively. TS Section 2.0 allows a period of 2 hours to bring the unit to a shutdown condition and then subsequently initiate the appropriate reporting requirements. The requirements of TSUP TS Section 2.0 allow a period of time to assess, evaluate and choose an appropriate course of action. During an event or transient that threatens a plant safety limit, immediate shutdown of the reactor may introduce additional uncertainty into the event. The 2 hour time frame prudently allows a reasonable time period to assess a situation in which a safety limit may be approached. Proposed TS 6.7.A.2 continues to ensure that a Licensee Event Report is submitted to the Commission in the event of a Safety Limit violation, consistent with 10 CFR 50.73. Proposed TS 6.7.A.3 includes requirements that resumption of power shall not be allowed until approved by the Commission. Based on the above, the staff finds the proposed TS acceptable.

3.6 Section 6.8, Procedures and Programs

Proposed TS 6.8.A requires that written procedures be established and maintained covering specified activities. These specified activities include those recommended in Appendix A of Regulatory Guide 1.33, Revision 2, Emergency Operating Procedures as stated in Generic Letter 82-33, the Station Security Plan, the Generating Station Emergency Response Plan, the PROCESS CONTROL PROGRAM, the OFFSITE DOSE CALCULATION MANUAL, and the Fire Protection Program. The proposed TS 6.8.A is based on the guidance of STS 6.8.1. The proposed TS have retained CTS Section 6.2.A requirements. The staff finds the proposed change acceptable.

Proposed Dresden TS 6.8.B and Quad Cities TS 6.8.D are new requirements. The proposed TS sections require the establishment and maintenance of the following programs: Reactor Coolant Sources Outside Primary Containment

(proposed TS 6.8.B.1 for Dresden and proposed 6.8.D.1 for Quad Cities); In-Plant Radiation Monitoring (proposed TS 6.8.B.2 for Dresden and proposed TS 6.8.D.2 for Quad Cities); Post Accident Sampling (proposed TS 6.8.B.3 for Dresden and proposed TS 6.8.D.3 for Quad Cities); and Radioactive Effluent Controls (proposed TS 6.8.B.4 for Dresden and proposed TS 6.8.D.4 for Quad Cities). The staff's evaluation of the proposed programs are discussed below.

Proposed TS 6.8.B.1 for Dresden and 6.8.D.1 for Quad Cities provides requirements for the Reactor Coolant Sources Outside Primary Containment program. Proposed TS 6.8.B.1 for Dresden and 6.8.D.1 for Quad Cities is based on the guidance of STS 6.8.4.a. The proposed TS replaces the current license condition for Systems Integrity for Dresden, Unit 3, and Quad Cities, Units 1 and 2. There is no such license condition for Dresden, Unit 2. The proposed program ensures that leakage from those portions of systems outside primary containment that could contain highly radioactive fluids during a serious transient or accident, remain as low as possible. The following systems are included in the program for Dresden and Quad Cities Stations: core spray (CS), high-pressure coolant injection (HPCI), low-pressure coolant injection (LPCI), process sampling, containment monitoring and standby gas treatment systems. Additionally, the program includes the isolation condenser for Dresden and the reactor core isolation coolant (RCIC) for Quad Cities.

The proposed TS did not include a detail specific list of process sampling systems. This could lead to potential misinterpretation of the proposed TS. A listing of the specific process sampling systems should be identified by the licensee and included in the TS. This item will remain as an open item to be addressed in the TSUP clean-up amendment.

Proposed TS 6.8.B.2 for Dresden and 6.8.D.2 for Quad Cities provides requirements for the In-Plant Radiation Monitoring program. The proposed program ensures the capability to accurately determine the airborne iodine concentrations. The proposed TS specify that the program shall include training of personnel, procedures for monitoring and provisions for maintenance of equipment. Proposed TS 6.8.B.2 for Dresden and 6.8.D.2 for Quad Cities is based on the guidance of STS 6.8.4.b. The proposed TS replaces the current license condition for Iodine Monitoring for Dresden, Unit 3, and Quad Cities, Units 1 and 2. There is no such license condition for Dresden, Unit 2. Because the proposed change retains existing requirements and administratively relocates the controls for in-plant radiation monitoring from a license condition to Section 6.0 of the proposed TS, the staff finds the proposed TS change acceptable.

Proposed TS 6.8.B.3 for Dresden and 6.8.D.3 for Quad Cities provides requirements for the Post-Accident Sampling program. Proposed TS 6.8.B.3 (6.8.D.3 for Quad Cities) is based on the guidance of STS 6.8.4.c. The proposed program ensures the capability to obtain and analyze reactor coolant, gaseous effluents, and containment atmosphere samples under accident conditions. The proposed TS specify that the program shall include training of personnel, procedures for sampling and provisions for maintenance of equipment. The proposed TS replaces the current license condition for

Post-Accident Sampling for Quad Cities, Units 1 and 2. There is no such license condition for Dresden, Unit 2 or Unit 3. The proposed change retains existing requirements for post-accident sampling for Quad Cities and adds additional requirements for Dresden Station. The staff, therefore, finds the proposed change acceptable.

Proposed TS 6.8.B.4 for Dresden and 6.8.D.4 for Quad Cities provides requirements for the Radioactive Effluent Controls Program. Proposed TS 6.8.B.4 for Dresden and 6.8.D.4 for Quad Cities is based upon the guidance of GL 89-01 regarding the implementation of controls for the Radiological Effluents Technical Specifications (RETS), Offsite Dose Calculation Manual (ODCM) and the Process Control Program (PCP). The RETS program ensures that the doses to members of the public from radioactive effluents will remain as low as reasonably achievable. The requirements of proposed TS 6.8.B.4.a, 6.8.B.4.c, 6.8.B.4.d, 6.8.B.4.e, 6.8.B.4.f, 6.8.B.4.h, 6.8.B.4.i and 6.8.B.4.j (6.8.D.4 for Quad Cities, respectively) are based upon the guidance of GL 89-01. The proposed requirements are consistent with the guidance of GL 89-01 with some deviations. The staff, therefore, finds the proposed changes acceptable. Deviations from GL 89-01 are evaluated below.

Proposed TS 6.8.B.4.b for Dresden and 6.8.D.4.b for Quad Cities regarding the limitations on the instantaneous concentrations of radioactive material released in liquid effluent, is a modification of the CTS requirements. The CTS requires radioactive material released in liquid effluent to be limited to the concentrations specified in 10 CFR Part 20, Appendix B, Table 2, Column 2 (500 mrem/year). The CTS does not address instantaneous effluent releases. To accommodate operational flexibility needed for effluent releases, the limit associated with the liquid release rate is being revised in the proposed TS to indicate ten times the concentration stated in the revised 10 CFR Part 20, Appendix B, Table 2, Column 2 for instantaneous liquid effluent releases (10 X 50 mrem/year = 500 mrem/year). The proposed TS provides operational flexibility in accordance with 10 CFR 50.36a. Additionally, the use of concentration values that correspond to ten times the concentration values stated in the revised 10 CFR Part 20, Appendix B, Table 2, Column 2, will not have a negative impact on the ability to continue to operate within the limits of 10 CFR Part 50, Appendix I. The proposed TS also ensures that the limits of Appendix I, which are more restrictive than 10 CFR Part 20 requirements, are not exceeded. Therefore, because the proposed changes ensure Appendix I limits are maintained, the staff finds the proposed changes acceptable.

The requirements of proposed TS 6.8.B.4.g for Dresden (proposed TS 6.8.D.4.g for Quad Cities) regarding the limitations on the dose rate resulting from radioactive materials released in gaseous effluents, have retained CTS requirements of Sections 3.8.A.1.a for Dresden and 3.8.A.1.b for Quad Cities. The gaseous effluent concentrations listed in 10 CFR Part 20, Appendix B, Table 2, Column 1, are concentrations which, if inhaled or ingested by a member of the public continuously over the course of a year, would produce a total effective dose equivalent of 50 mrem. Application of 10 CFR Part 20, Appendix B, Table 2, Column 1, limits on an instantaneous basis would

correspond to a maximum dose limit of 50 mrem/year, which is ten times more restrictive than the current limit.

The CTS requirement of 500 mrem/year is acceptable as a TS limit for gaseous effluents to meet the requirements of 10 CFR Part 50, Appendix I. Therefore, it is unnecessary to reduce the limiting dose rate to 50 mrem/year (i.e., the concentrations in 10 CFR Part 20, Appendix B, Table 2). A dose rate of 500 mrem/year on an instantaneous basis will allow operational flexibility consistent with 10 CFR 50.36a, as well as maintain the current level of effluent control (i.e., small percentages on 10 CFR Part 50, Appendix I limits).

The proposed TS, which is based on guidance contained in NUREG-0133, applies at all times as an assurance that the values in Appendix I of 10 CFR Part 50 are not likely to be exceeded. The proposed TS will not change ability to continue to operate within the requirements specified in Appendix I of 10 CFR Part 50 and 40 CFR Part 190. Based on the above, it is acceptable that the gaseous release rate TS for radioactive material be based on the stated dose rates. The staff finds the proposed TS acceptable.

The current requirements for the content of the licensee's TS concerning radioactive effluents are contained in 10 CFR 50.36a. 10 CFR 50.36a requires licensees to maintain control over radioactive material in gaseous and liquid effluents released to unrestricted areas, produced during normal reactor operations, to levels that are as low as reasonable achievable (ALARA). For power reactors, Appendix I to 10 CFR Part 50 contains the numerical guidance to meet the ALARA requirement. The dose values specified in Appendix I of 10 CFR Part 50 are small percentages of the implicit limits in 10 CFR 20.1301. For purposes of the bases of this TS, 10 CFR Part 20 is used as a source of reference values only. The proposed TS requirements allow operational flexibility, compatible with considerations of health and safety, which may temporarily result in release rates which, if continued for the calendar quarter, would result in radiation doses higher than specified in Appendix I of 10 CFR Part 50. However, these releases are within the limits specified in 10 CFR 20.1302. Based on the above the staff finds the proposed TS concerning Radioactive Effluent Controls Program is acceptable.

The RETS requirements from current TS Section 3/4.8 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 Calculation 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. The staff also

determined that the procedural details of the TS on radioactive effluents and radiological environmental monitoring could be relocated to the ODCM, while the procedural details for processing wet solid wastes could be relocated to the PCP. These procedural details that have been removed from the TS are not required by the Commission's regulations to be included in the TS. The staff's evaluation of such changes has been reviewed and approved in TSUP TS Section 3/4.8. They have been prepared for incorporation in the ODCM or PCP, which are referenced in the UFSAR, 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 50.55(c). Therefore, the staff finds the proposed TS acceptable.

Based on the above evaluation the staff finds proposed TS 6.8 Procedures and Programs has been formatted in accordance with the STS guidelines and has retained CTS requirements. When CTS requirements were not retained or modified the staff has evaluated each change and found it acceptable. Therefore the staff finds proposed TS 6.8 acceptable.

3.7 Section 6.9, Reporting Requirements

Proposed TS 6.9 is based upon the guidance of STS Section 6.9. Proposed TS 6.9.A.2 provides the requirements for the Annual Report which includes the tabulation of exposure history for plant personnel. This report also includes the results of the site's specific activity analyses. Proposed TS 6.9.A.3 provides the requirements for the Annual Radiological Environmental Report. This report includes information related to the Radiological Environmental Monitoring Program. Proposed TS 6.9.A.4 provides the requirements for the Radioactive Effluent Release Report. This report encompasses the provisions of the ODCM, PCP, 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50. Proposed TS 6.9.A.5 provides the requirements for the plant Monthly Operating Report. This report includes relevant plant operating statistics. Proposed TS 6.9.A.6 provides the requirements for the CORE OPERATING LIMITS REPORT. This report includes a summary of the core thermal hydraulic operating limits and analytical methods used to derive those limits. Proposed TS 6.9 is consistent with the requirements of CTS 6.6 with the following exceptions.

CTS 6.6.A.1 regarding the submittal of a startup report to the NRC has been deleted from the proposed TS. These requirements are adequately controlled in the UFSAR and plant procedures referenced in the UFSAR by the provisions of 10 CFR 50.59. The staff has determined that the requirements for submittal of a startup report 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.

Eliminating these details from the TS will not affect plant safety and is, therefore, acceptable.

Dresden CTS 6.6.B requires that reportable events be submitted as required by 10 CFR 50.73. This TS has been eliminated since it is redundant to the requirements of 10 CFR 50.73 and in accordance with the STS guidelines. The staff finds this acceptable.

Dresden CTS 6.6.C.1 and Quad Cities CTS 6.6.B.1 require a semi-annual radioactive effluent release report. This requirement has been changed to an annual report in proposed TS 6.9.A.4. This change is consistent with the final rule for reducing the regulatory burden on nuclear licensees that was published in the Federal Register on August 31, 1992. The rule change included a revision to 10 CFR 50.36a regarding the frequency for submitting radiological effluent reports. This change makes the TS consistent with the requirements of 10 CFR 50.36a and is acceptable.

Dresden CTS 6.6.C.3 and Quad Cities CTS 6.6.B.4 require that special reports be submitted as specified in Dresden CTS Table 6.6.1 and Quad Cities CTS Table 6.6-1. Proposed TS 6.9.B maintains the requirements for submission of Special Reports. Special Report requirements are listed in the individual specifications throughout the TS. CTS Table 6.6.1 for Dresden and CTS Table 6.6-1 for Quad Cities, which lists each report, its CTS reference, and its submittal date, has not been retained in the proposed TS. One-time reports, which were required 5 years within unit commercial service date or upon completion of initial testing, have been deleted from the proposed TS since these requirements are obsolete. The only remaining reports listed in Table 6.6.1 are the results of the Secondary Containment Leak Rate Test and Radioactive Source Leak Test. Requirements pertaining to Radioactive Source Leak Testing reporting have been relocated to proposed TS 3.8.G, Action 2. This issue was addressed and approved by the staff during its review of the TS amendments related to proposed TSUP TS Section 3/4.8. Requirements pertaining to Secondary Containment Leak Rate Testing reporting have been deleted from the TS in accordance with the STS guidelines. The staff has determined that the requirements for submittal of a Secondary Containment Leak Rate Test report 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. Therefore, the proposed TS is acceptable.

For continuity, it should be noted that proposed TS 6.10 was left as intentionally blank by the licensee. As such, no staff evaluation of proposed TS 6.10 is required.

3.8 Section 6.11, Radiation Protection Program

Proposed TS 6.11 requires that procedures for personnel radiation protection be prepared consistent with 10 CFR Part 20. Proposed TS 6.11 is based on the guidance of STS 6.11. The proposed TS have retained CTS requirements. Therefore, the staff finds that proposed TS 6.11 is acceptable.

3.9 Section 6.12, High Radiation Area

Proposed TS 6.12.A contains the requirements for administrative control of high radiation areas when dose rates are above 100 mrem/hr at 30 cm. The proposed requirements of 6.12.A are based on the guidance of STS 6.12.1. The proposed TS retain CTS 6.12.A requirements. The staff finds that proposed 6.12.A is acceptable.

Proposed TS 6.12.B contains the requirements for administrative control of high radiation areas where dose rates are above 1000 mrem/hr at 30 cm. Proposed 6.12.B is based on the guidance of STS 6.12.2. The proposed requirements are equivalent to CTS 6.12.2 with the following exceptions:

The proposed TS removes the requirement to establish a stay time in the radiation work permit (RWP) for personnel entering areas where dose rates are above 1000 mrem/hr at 30 cm. In lieu of this requirement, the proposed TS adds a new requirement that persons entering these areas must have an alarming radiation monitoring device or have continuous surveillance and radiation monitoring by a qualified Radiation Protection Technician. The proposed TS ensures that exposure is appropriately controlled and maintains a level of safety equivalent to the current TS. Therefore, this change is acceptable.

The current and proposed TS contain a requirement that personnel access and exposure control requirements of activities being performed in areas where dose rates are above 1000 mrem/hr, shall be specified by an approved RWP. The proposed TS contain an exception which allows the routine RWP to be replaced by continuous surveillance and radiation monitoring by a qualified individual during emergency situations which involve personnel injury or actions taken to prevent major equipment damage. However, in the event of an emergency, when needed to protect the public health and safety, 10 CFR 50.54(x) allows deviation from TS requirements when it is not immediately apparent that the TS provide adequate or equivalent protection. As such, the staff believes that 10 CFR 50.54(x) should suffice in all situations. Therefore, this item should remain as an open item to be addressed by the licensee in the TSUP cleanup amendment.

3.10 Section 6.13, Process Control Program (PCP)

Proposed TS 6.13 is based on the guidance of GL 89-01 regarding the implementation of controls for the RETS, ODCM and the PCP. Proposed TS 6.13.A discusses the requirements for making changes to the PCP and has retained CTS 6.9 requirements with the following exceptions.

The CTS require that changes made to the PCP be recorded in the Radioactive Effluent Report which is currently submitted to the NRC on a biannual basis. In the proposed TS this reporting requirement has been deleted. The proposed TS require that changes to the PCP be documented and that records of reviews be retained. The proposed TS is consistent with the guidance provided in GL 89-01. The staff finds this acceptable.

The CTS require that changes to the PCP be reviewed and approved by the On-Site Review Function. The proposed TS only requires the Station Manager approval for changes to the PCP. The staff finds that allowing the Station Manager alone approving changes to the PCP is not acceptable. The staff finds that changes to the PCP should continue to receive On-Site review and approval. Therefore, this is considered an open item and should be addressed by the licensee in the TSUP cleanup amendment.

CTS 6.9.A regarding the definition of the PCP is encompassed within TSUP Section 1.0, "Definitions" which was approved by Amendment Nos. 134 and 128 to the Dresden TS and Amendment Nos. 152 and 148 to the Quad Cities TS. The definition of PCP in TS 1.0 is consistent with the guidance of GL 89-01. Therefore, the relocation of the definition of PCP from CTS 6.0 to TS 1.0 is consistent with the guidance of GL 89-01 and, therefore, the staff finds this acceptable.

CTS 6.9.B requires that the PCP be approved by the NRC prior to implementation. The CTS requirements are obsolete and are based on Dresden and Quad Cities TS submittals in the early 1980's related to the incorporation of the original RETS. The CTS requirements have been relocated consistent with the guidance of GL 89-01 regarding RETS, ODCM and PCP. Because the relocation of these requirements from the TS is consistent with GL 89-01, the staff finds it acceptable.

3.11 Section 6.14, Offsite Dose Calculation Manual (ODCM)

Proposed TS 6.14.A is based on the guidance of GL 89-01 regarding the implementation of controls for the RETS, ODCM and the PCP. Proposed TS 6.14.A discusses the requirements for making changes to the ODCM and retains CTS 6.8 requirements with the following exceptions.

CTS 6.8.B requirements that changes to the ODCM be reviewed and approved by the On-Site Review Function has been modified in the proposed TS to require that the changes be approved by the Station Manager. In addition, CTS 6.8.B requirements that the change be submitted to the NRC in the Monthly Operating Report has been modified in the proposed TS 6.14 to require that the changes be submitted to the NRC as a part of, or concurrent with, the Radioactive Effluent Report for the period of the report in which any change to the ODCM was made effective. The proposed TS is consistent with the guidance given in GL 89-01 provided the changes to the ODCM are reviewed and found acceptable by the on-site review function and approved by the Station Manager. As indicated above in Section 3.10 of this SE concerning the PCP the staff does not find that the Station Manager alone can approve changes to the ODCM. This item should remain as an open item to be addressed in the TSUP cleanup amendment.

CTS 6.8.A regarding the definition of the ODCM is encompassed within TSUP Section 1.0 which was approved by Amendment Nos. 134 and 128 to the Dresden TS and Amendment Nos. 152 and 148 to the Quad Cities TS. The definition of ODCM in TS 1.0 is consistent with the guidance of GL 89-01. Therefore, the relocation of the definition of the ODCM from proposed TS Section 6.0 to TS

1.0 is consistent with the guidance of GL 89-01, and the staff finds it acceptable.

CTS 6.8.A regarding the submittal of the ODCM at the time of proposed RETS is superseded by the proposed TS. The current requirements are obsolete and are based on Dresden and Quad Cities TS submittals in the early 1980's related to the incorporation of the original RETS. The proposed requirements are consistent with the guidance of GL 89-01 and, therefore, the staff finds the proposed TS acceptable.

3.12 Relocated Requirements

The following sections deal with the relocation of CTS requirements in accordance with the STS guidelines and NRC GL guidance.

3.12.1 Training Requirements

CTS 6.1.F requires that operator retraining be conducted at intervals not exceeding 2 years. This requirement has not been retained in the proposed TS because training requirements are adequately controlled via the provisions of ANSI N18.1 or by the licensing requirements of the individual operator's license. Therefore, the requirements of current TS 6.1.F are unnecessary for inclusion in the TS.

3.12.2 Review and Investigate Function

Current TS 6.1.G regarding the responsibilities and authorities of the Review and Investigative Function and the Audit Function have not been retained in the proposed TS. The requirements contained in this section will be relocated to the ComEd Quality Assurance Program. This change was previously approved by Amendment Nos. 141, 135, 163, and 159 to the Dresden and Quad Cities TS. Therefore, removing these requirements from the TS is acceptable.

3.12.3 Fire Protection Program Inspection

Current TS 6.1.H regarding an independent fire protection and loss prevention program inspection and audit has not been retained in the proposed TS. The requirements of this section will be relocated to the ComEd Quality Assurance Program. These current TS provisions are not necessary to assure safe operation of the plants based on the fact that the requirements in the QA program implement the Commissions regulations pertaining to this inspection and audit function. Control of changes to the QA program are governed by the provisions of 10 CFR 50.54(a). The staff finds that the QA program provides sufficient control for the audit functions and frequencies, so that removing these requirements from the TS is acceptable.

3.12.4 Control of Procedures

Current Dresden TS 6.2.B and current Quad Cities TS 6.2.C regarding technical review and control of procedures, and current Dresden TS 6.2.C and current Quad Cities TS 6.2.D regarding temporary changes to procedures have been deleted from the TS and relocated to administrative controls. Relocation is based on existing regulation and standards that contain these provisions, such that duplication in the proposed TS is unnecessary. The requirements for the establishment, maintenance and implementation of procedures related to activities affecting quality are contained in 10 CFR 50, Appendix B, Criteria II and V; ANSI N18.7-1976; and ANSI N45.2-1971 and are also referenced in the UFSAR. Changes to implementing procedures will be controlled by the requirements of 10 CFR 50.59 to ensure proper reviews are performed. In addition, at the staff's request by letter dated February 29, 1996, the licensee committed to treat the relocated provisions as if they were part of the QA plan and control changes of the related requirements in accordance with 10 CFR 50.54(a). Pending a future change to the QA plan to incorporate these provisions, this commitment is adequate to resolve staff concerns regarding the application of the appropriate change mechanisms to QA requirements. Therefore, the deletion of these requirements from the TS is acceptable.

Current Dresden TS 6.2.D and current Quad Cities TS 6.2.E regarding drills of the emergency procedures has not been retained in the proposed TS. The Generating Station Emergency Plans Manual referenced in the current TS are encompassed within the requirements of proposed TS 6.8.A.4 which specifies that written procedures shall be established, implemented and maintained covering the activities associated with implementation of the Generating Station Emergency Response Plan. The staff finds the proposed TS change acceptable.

3.12.5 Reportable Event Required Actions

CTS 6.3 regarding requirements for promptly reviewing and reporting reportable events has not been retained in the proposed TS. The review requirements are adequately described in plant procedures and the Quality Assurance Program. Therefore, their inclusion in the TS is redundant and unnecessary. The reporting requirements in the CTS are contained in proposed TS 6.9.A which are consistent with STS 6.9. The staff finds the relocation of the reporting requirements from the TS is acceptable.

3.12.6 Plant Operating Records

CTS 6.5 regarding retention of plant operating records has not been retained in the proposed TS. The requirements related to record retention and control has been relocated to the UFSAR. Changes to the UFSAR are controlled by 10 CFR 50.59. Therefore, the relocation of these requirements from the TS to the UFSAR is acceptable.

3.12.7 Environmental Qualification of Electrical Equipment

CTS 6.7 requires that all safety-related electrical equipment be qualified by June 30, 1982, and that records be available which describe the environmental qualification method used by December 1, 1980. These requirements have been deleted from the proposed TS. The provisions and controls required by 10 CFR 50.49 "Environmental Qualification of Electrical Equipment Important to Safety for Nuclear Power Plant" provide sufficient measures regarding the environmental qualification of electrical equipment. The current requirement provides information that is inappropriate for inclusion within the TS. 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 referenced in the UFSAR and may be subsequently changed by the licensee in accordance with 10 CFR 50.49 and 10 CFR 50.59. The proposed change provides an equivalent level of protection for the plant. The staff has concluded that relocation of the procedure review requirements is acceptable because (1) their inclusion in the TS is not specifically required by 10 CFR 50.36 or other regulations, (2) inventory control is 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 these 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 50.59 and 10 CFR 50.49. Because the current TS requirements are superseded by the provisions of 10 CFR 50.49, the staff finds that the relocation of CTS Section 6.7 requirements is acceptable.

3.12.8 Major Changes to Radwaste Treatment Systems

CTS 6.10 provides the requirements for making major changes to the radwaste treatment systems. The CTS requirements are being relocated in accordance with guidance GL 89-01. The programmatic requirements contained within CTS 6.10 are relocated to the ODCM in accordance with the GL 89-01. The staff finds this acceptable.

3.12.9 Conclusion

The staff has determined that the requirements discussed above 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 each of the above requirements are referenced in the UFSAR. Changes to the requirements would be controlled by 10 CFR 50.59. Therefore, the relocation of these requirements is acceptable.

3.13 Open Items

These should be left as open items, contingent upon their approval in the clean-up amendment.

1. The definition of the ODCM should be changed to refer to the "Annual" Radioactive Effluent Release Report in lieu of "Semi-annual" to be consistent with proposed TS 6.9.
2. The requirements for process sampling in proposed TS 6.8.B.1 for Dresden and proposed TS 6.8.D.1 for Quad Cities should further define process sampling.
3. The review requirements for the PCP and ODCM, in proposed TS 6.13.A.2 and proposed TS 6.14.A.2, respectively, should include appropriate on-site review of any such changes.
4. Proposed 6.12.B.4, regarding emergency situations, should be deleted.

4.0 SUMMARY

The proposed TS for Section 6.0 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 current TS. Therefore, the staff finds the proposed TS changes, with the exception of the open items listed above, are 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 recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). 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 Contributor: D. Skay

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