

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

DUQUESNE LIGHT COMPANY OHIO EDISON COMPANY PENNSYLVANIA POWER COMPANY DOCKET NO. 50-334 BEAVER VALLEY POWER STATION, UNIT NO. 1 AMENDMENT TO FACILITY OPERATING LICENSE

> Amendment No.191 License No. DPR-66

- The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duquesne Light Company, et al. (the licensee) dated August 31, 1994, as supplemented May 18, 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.

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- 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-66 is hereby amended to read as follows:
 - (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 191, 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, to be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Director Project Directorate I-2 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: August 31, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 191

FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Replace the following pages of Appendix A Technical Specifications, with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove	Insert
3/4 0-2	3/4 0-2
3/4 0-3	3/4 0-3
6-1	6-1
6-3	6-3
6-5	6-5
6-7	6-7
6-8	6-8
6-10	6-10
6-11	6-11
6-12	6-12

DPR-66 3/4.0 APPLICABILITY

SURVEILLANCE REOUIREMENTS

- 1. At least HOT STANDBY within the next 6 hours,
- At least HOT SHUTDOWN within the following 6 hours, and 2.
- 3. At least COLD SHUTDOWN within the subsequent 24 hours.

This specification is not applicable in MODES 5 or 6.

4.0.1 Surveillance Requirements shall be met during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval.

4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with a Limiting Condition for Operation has been performed within the stated surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2 and 3 components shall be applicable as follows:

a.1 Inservice inspection of ASME Code Class 1, 2 and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g).

BEAVER VALLEY - UNIT 1 3/4 0-2

DPR-66 3/4.0 APPLICABILITY

SURVEILLANCE REQUIREMENTS

- a.2 Inservice testing of ASME Code Class 1, 2 and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(f).
- b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda for the inservice inspection and testing activities required by the ASME Boiler and Pressure Vessel Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

ASME Boiler and Pressure Vessel	Required frequencies for
Code and applicable Addenda	performing inservice
terminology for inservice	inspection and testing
inspection and testing activities	activities

Weekly Monthly Quarterly or every 3 months Semiannually or every 6 months Every 9 months Yearly or annually

At least once per 7 days At least once per 31 days At least once per 92 days At least once per 184 days At least once per 276 days At least once per 366 days

- c. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice inspection and testing activities.
- ú. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.
- e. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any Technical Specification.

6.1 RESPONSIBILITY

6.1.1 The General Manager, Nuclear Operations shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

6.2 ORGANIZATION

6.2.1 ONSITE AND OFFSITE ORGANIZATIONS

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

- a. 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. Those 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 FSAR.
- b. The General Manager, Nuclear Operations 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.
- c. The Senior Vice President, Nuclear Power Division 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.
- d. 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.

BEAVER VALLEY - UNIT 1

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UNIT STAFF (Continued)

- c. A break of at least eight hours should be allowed between work periods, including shift turnover time.
- d. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the General Manager, Nuclear Operations or predesignated alternate, or higher levels of management. Authorized deviations to the working hour guidelines shall be documented and available for NRC review.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility and Radiation Protection staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the Health Physics Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and the technical advisory engineering representative who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response analysis of the plant for transients and accidents.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Nuclear Training Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and 10 CFR Part 55.

6.5 REVIEW AND AUDIT

6.5.1 ONSITE SAFETY COMMITTEE (OSC)

FUNCTION

6.5.1.1 The OSC shall function to advise the General Manager, Nuclear Operations on all matters related to nuclear safety and shall provide review capability in the areas of:

- a. nuclear power plant operations
- b. radiological safety
- c. maintenance
- d. nuclear engineering
- e. nuclear power plant testing
- f. technical advisory engineering
- g. chemistry
- h. quality control
- i. instrumentation and control

COMPOSITION

6.5.1.2 The Onsite Safety Committee Supervisor is the CSC Chairman and shall appoint all members of the OSC. The membership shall consist of a minimum of one individual from each of the areas designated in 6.5.1.1.

OSC members and alternates shall meet or exceed the minimum qualifications of ANSI N18.1-1971 Section 4.4 for comparable positions. The nuclear power plant operations individual shall meet the qualifications of Section 4.2.2 and the maintenance individual shall meet the qualifications of Section 4.2.3.

BEAVER VALLEY - UNIT 1

Amendment No. 191

AUTHORITY

6.5.1.7 The OSC shall:

- a. Recommend to the General Manager, Nuclear Operations written approval or disapproval of items considered under 6.5.1.6.a through .d above.
- b. Render determinations in writing with regard to whether or not each item considered under 6.5.1.6.a through .e above constitutes an unreviewed safety question.
- c. Provide written notification within 24 hours to the Senior Vice President, Nuclear Power Division and the Offsite Review Committee of disagreement between the OSC and the General Manager, Nuclear Operations; however, the General Manager, Nuclear Operations shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

RECORDS

6.5.1.8 The OSC shall maintain written minutes of each meeting and copies shall be provided to the General Manager, Nuclear Operations and Chairman of the Offsite Review Committee.

6.5.2 OFFSITE REVIEW COMMITTEE (ORC)

FUNCTION

6.5.2.1 The ORC shall function to provide independent review and audit of designated activities in the areas of:

- a. nuclear power plant operations
- b. nuclear engineering
- c. chemistry and radiochemistry
- d. metallurgy
- e. instrumentation and control
- f. radiological safety
- g. mechanical and electrical engineering
- h. quality assurance practices

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COMPOSITION

6.5.2.2 The chairman and all members of the ORC shall be appointed by the Senior Vice President, Nuclear Power Division. The membership shall consist of a minimum of five individuals who collectively possess a broad based level of experience and competence enabling the committee to review and audit those activities designated in 6.5.2.1 above and to recognize when it is necessary to obtain technical advice and counsel. An individual may possess expertise in more than one specialty area. The collective competence of the committee will be maintained as changes to the membership are made.

ALTERNATES

6.5.2.3 All alternate members shall be appointed in writing by the ORC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in ORC activities at any one time.

CONSULTANTS

6.5.2.4 Consultants shall be utilized as determined by the ORC Chairman to provide expert advice to the ORC.

AUDITS

6.5.2.8 Audits of facility activities shall be performed under the cognizance of the ORC. These audits shall encompass:

- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions.
- b. The performance, training and gualifications of the entire facility staff.
- c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems, or methods of operation that affect nuclear safety.
- d. The performance of activities required by the Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50.
- e. Not used.
- f. Not used.
- g. Any other area of facility operation considered appropriate by the ORC or Senior Vice President, Nuclear Power Division.
- h. The Facility Fire Protection Program and implementing procedures at least once per 24 months.
- An independent fire protection and loss prevention program inspection and audit shall be performed at least once per 12 months utilizing either qualified off-site licensee personnel or an outside fire protection firm.
- j. An inspection and audit of the fire protection and loss prevention program shall be performed by a qualified outside fire consultant at least once per 36 months.
- k. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures.
- The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive waste.

BEAVER VALLEY - UNIT 1

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AUTHORITY

6.5.2.9 The ORC shall report to and advise the Senior Vice President, Nuclear Power Division on those areas of responsibility specified in Section 6.5.2.7 and 6.5.2.8.

RECORDS

6.5.2.10 Records of ORC activities shall be prepared, approved and distributed as indicated by the following:

- a. Minutes of each ORC meeting shall be prepared for and approved by the ORC Chairman or Vice-Chairman within 14 days following each meeting.
- Reports of reviews encompassed by Section 6.5.2.7 above, b. shall be documented in the ORC meeting minutes.
- Audit reports encompassed by Section 6.5.2.8 above, shall C. be forwarded to the Senior Vice President, Nuclear Power Division and to the management positions responsible for the areas audited within 30 days after completion of the audit.

6.6 REPORTABLE EVENT ACTION

- The following actions shall be taken for REPORTABLE EVENTS: 6.6.1
 - The Commission shall be notified in accordance with 10 CFR a. 50.72 and/or a report be submitted pursuant to the requirements of Section 50.73 to 10CFR Part 50, and
 - Each REPORTABLE EVENT shall be reviewed by the OSC, and b. results of this review shall be submitted to the ORC.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- The facility shall be placed in at least HOT STANDBY within a. one (1) hour.
- b. The Safety Limit violation shall be reported to the Commission within one hour and to the General Manager, Nuclear Operations and to the ORC within 24 hours.

SAFETY LIMIT VIOLATION (Continued)

- c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the On-Site Safety Committee (OSC). This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence.
- d. The Safety Limit Violation Report shall be submitted to the Commission, the ORC and the General Manager, Nuclear Operations within 30 days of the violation.

6.8 PROCEDURES

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- a. The applicabil procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.
- b. Refueling operations.
- c. Surveillance and test activities of safety related equipment.
- d. Not used.
- e. Not used.
- f. Fire Protection Program implementation.
- g. PROCESS CONTROL PROGRAM implementation.
- h. OFFSITE DOSE CALCULATION MANUAL implementation.

6.8.2 Each procedure and administrative policy of 6.8.1 above and changes of intent thereto, shall be reviewed by the OSC and approved by the General Manager, Nuclear Operations, predesignated alternate or a predesignated Manager to whom the General Manager, Nuclear Operations has assigned in writing the responsibility for review and approval of specific subjects considered by the committee, as applicable. Changes to procedures and administrative policies of 6.8.1 above that do not receive OSC review, such as correcting , typographical errors, reformatting procedures and other changes not affecting the purpose for which the procedure is performed shall receive an independent review by a qualified individual and approved by a designated manager or director.

BEAVER VALLEY - UNIT 1

Amendment No. 191



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

THE TOLEDO EDISON COMPANY

DOCKET NO. 50-412

BEAVER VALLEY POWER STATION. UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.74 License No. NPF-73

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duquesne Light Company, et al. (the licensee) dated August 31, 1994, as supplemented May 18, 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.

- 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. NPF-73 is hereby amended to read as follows:
 - (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 74, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. DLCO shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- Further, Facility Operation License No. NPF-73, Paragraphs 2.C.(3), 2.C.(5), 2.C.(7), 2.C.(8), 2.C.(9), and 2.C.(10) are hereby amended to read as follows:
 - (3) <u>Initial Startup Test Program</u> (Section 14 of t.e SER, and Supplements 3 and 5)

Deleted

2.

(5) Inservice Inspection (Section 6.6 of SER Supplement 5)

Deleted

(7) <u>Plant Safety Monitoring System (PSMS)</u>

Deleted

- (8) <u>Detailed Control Room Design Review (DCRDR)</u> Deleted
- (9) <u>Safety Parameter Display System (SPDS)</u> Deleted
- (10) <u>Fire Protection Modifications (Section 9.5.1 of SER Supplement 6)</u> Deleted

 This license amendment is effective as of the date of its issuance, to be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Director Project Directorate I-2 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachments: 1. Pages 4* and 5* of Facility Operating License No. NPF-73 2. Changes to the Technical Specifications

Date of Issuance: August 31, 1995

*Pages 4 and 5 are attached, for convenience, for the composite license to reflect this change.

ATTACHMENT TO LICENSE AMENDMENT NO. 74

FACILITY OPERATING LICENSE NO. NPF-73

DOCKET NO. 50-412

Replace the following pages of the Facility Operating License (FOL) and of the Appendix A, Technical Specifications, with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

	Remove	Insert
FOL	4 5	4 5
Appendix A	3/4 0-2 3/4 0-3 6-1 6-2 6-3 6-6 6-8 6-9 6-10 6-11 6-12 6-13 6-14 6-15	3/4 0-2 3/4 0-3 6-1 6-2 6-3 6-6 6-8 6-9 6-10 6-11 6-12 6-13 6-14 6-15

(3) <u>Initial Startup Test Program</u> (Section 14 of the SER, and Supplements 3 and 5)

Deleted

(4) Fresh Fuel Storage

The following criteria apply to the storage and handling of new fuel assemblies in the fuel handling building:

- (a) No more than two fuel assemblies shall be out of approved shipping containers or fuel assembly storage racks at any one time.
- (b) The minimum edge-to-edge distance between the above two new assemblies, the shipping container array, and the storage rack arrays shall be at least 12 inches.
- (c) New fuel assemblies shall be stored in such a manner that water would drain freely from the assemblies in the event of flooding and subsequent draining of the fuel storage area.
- (5) Inservice Inspection (Section 6.6 of SER Supplement 5)

Deleted

(6) Formal Federal Emergency Management Agency Finding

In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of emergency preparedness, the provisions of 10 CFR Section 50.54(s)(2) will apply.

(7) Plant Safety Monitoring System (PSMS)

Deleted

BEAVER VALLEY UNIT 2

Amendment No. 16.74

(8) Detailed Control Room Design Review (DCRDR)

Deleted

(9) <u>Safety Parameter Display System (SPDS)</u>

Deleted

- (10) <u>Fire Protection Modifications (Section 9.5.1 of SER Supplement 6)</u> Deleted
- D. Exemptions

The following exemptions are authorized by law and will not endanger life or property or the common defense and security, and certain special circumstances are present. With the granting of these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

(1)The facility requires an exemption from the requirements of General Design Criterion (GDC) 4, Appendix A to 10 CFR 50. The staff has described in detail in Supplement 4 and Supplement 5 to the Safety Evaluation Report the technical basis and "special circumstances" associated with this exemption. The staff's environmental assessment was published on March 27, 1987 (52 FR 9979). Therefore, pursuant to 10 CFR 50.12(a)(1). 10 CFR 50.12(a)(2)(ii) and (iv), Beaver Valley Power Station. Unit 2 is exempt from the requirements of GDC 4, Appendix A to 10 CFR 50 with respect to the dynamic loading effects associated with the postulated pipe breaks described in detail in Section 3.6.3 of Supplement 4 to the Safety Evaluation Report. These dynamic loading effects include pipe whip, jet impingement, and break-associated dynamic transients. Specifically, this eliminates the need to install jot impingement barriers and pipe whip restraints associated with postulated pipe breaks in the pressurizer surge line, reactor coolant bypass system.

BEAVER VALLEY - UNIT 2

Amendment No. 74

NPF-73 APPLICABILITY

SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance Requirements shall be met during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval.

4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2. shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with a Limiting Condition for Operation has been performed within the surveillance interval or as otherwise specified. This stated provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2 and 3 components shall be applicable as follows:

- a.1 Inservice inspection of ASME Code Class 1, 2 and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g).
- a.2 Inservice testing of ASME Code Class 1, 2 and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(f).

NPF-73 APPLICABILITY

SURVEILLANCE REOUIREMENTS

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

ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice inspection and testing activities	Required frequencies for performing inservice inspection and testing activities
Weekly	At least once per 7 days

Monthly Quarterly or every 3 months Semiannually or every 6 months Every 9 months Yearly or annually

er 7 days At least once per 31 days At least once per 92 days At least once per 184 days At least once per 276 days At least once per 366 days

- c. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice inspection and testing activities.
- d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.
- e. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any Technical Specification.

6.1 RESPONSIBILITY

6.1.1 The General Manager, Nuclear Operations shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

6.2 ORGANIZATION

6.2.1 ONSITE AND OFFSITE ORGANIZATIONS

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

- a. 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 FSAR.
- The General Manager, Nuclear Operations shall be responsible for b. overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
- c. The Senior Vice President, Nuclear Power Division 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.
- d. 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.

6.2.2 UNIT STAFF

The unit organization shall be subject to the following:

- a. Each duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Operator shall be in the control room when fuel is in the reactor.

BEAVER VALLEY - UNIT 2 6-1

Amendment No.74

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UNIT STAFF (Continued)

- c. At least two licensed Operators shall be in the control room during reactor start-up, scheduled reactor shutdown and during recovery from reactor trips.
- d. An individual qualified in radiation protection procedures shall be onsite when fuel is in the reactor.
- e. All CORE ALTERATIONS after the initial fuel loading shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- f. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; senior reactor operators, reactor operators, radiation control technicians, auxiliary operators, meter and control repairman, and all personnel actually performing work on safety related equipment.

The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance or major plant modifications, on a temporary basis, the following guidelines shall be followed:

- a. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
- b. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any seven day period, all excluding shift turnover time.
- c. A break of at least eight hours should be allowed between work periods, including shift turnover time.
- d. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the General Manager, Nuclear Operations or predesignated .| alternate, or higher levels of management. Authorized deviations to the working hour guidelines shall be documented and available for NRC review.

BEAVER VALLEY - UNIT 2

6.2.3 INDEPENDENT SAFETY EVALUATION GROUP (ISEG)

FUNCTION

6.2.3.1 The ISEG shall function to examine unit operating characteristics, NRC issuances, industry advisories, Licensee Event Reports, and other sources of unit design and operating experience information, including units of similar design, which may indicate areas for improving unit safety. The ISEG shall make detailed recommendations for revised procedures, equipment modifications, maintenance activities, operations activities, or other means of improving unit safety to corporate management. If not otherwise implemented, all recommendations shall then be made to the Senior Vice President, Nuclear Power Division.

COMPOSITION

6.2.3.2 The ISEG shall be composed of at least five, dedicated, full-time engineers located on site. Each shall have either:

- (1) A bachelor's degree in engineering or related science and at least 2 years professional level experience in his field, at least 1 year of which experience shall be in the nuclear field, or
- (2) At least 5 years of nuclear experience and hold or have held a Senior Reactor Operator license, or
- (3) At least 10 years of professional level experience in his field, at least 5 years of which experience shall be in the nuclear field.

A minimum of 50% of these personnel shall have the qualifications specified in (1) above.

RESPONSIBILITIES

6.2.3.3 The ISEG shall be responsible for maintaining surveillance of unit activities to provide independent verification(1) that these activities are performed correctly and that human errors are reduced as much as practical.

RECORDS

6.2.3.4 Records of activities performed by the ISEG shall be prepared, maintained, and a summary report shall be forwarded each calendar month to the Senior Vice President, Nuclear Power Division.

(1) Not responsible for sign-off function.

BEAVER VALLEY - UNIT 2 6-3 (next page is 6-5) Amendment No.74

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility and Radiation Protection staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the Health Physics Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and the technical advisory engineering representative who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response analysis of the plant for transients and accidents.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Nuclear Training Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and 10 CFR Part 55.

6.5 REVIEW AND AUDIT

6.5.1 ONSITE SAFETY COMMITTEE (OSC)

FUNCTION

6.5.1.1 The OSC shall function to advise the General Manager, Nuclear Operations on all matters related to nuclear safety and shall provide review capability in the areas of:

- a. nuclear power plant operations
- b. radiological safety
- c. maintenance
- d. nuclear engineering
- e. nuclear power plant testing
- f. technical advisory engineering
- g. chemistry
- h. quality control
- i. instrumentation and control

COMPOSITION

6.5.1.2 The Onsite Safety Committee Supervisor is the OSC Chairman and shall appoint all members of the OSC. The membership shall consist of a minimum of one individual from each of the areas designated in 6.5.1.1.

OSC members and alternates shall meet or exceed the minimum qualifications of ANSI N18.1-1971 Section 4.4 for comparable positions. The nuclear power plant operations individual shall meet the qualifications of Section 4.2.2 and the maintenance individual shall meet the gualifications of Section 4.2.3.

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AUTHORITY

- 6.5.1.7 The OSC shall:
 - a. Recommend to the General Manager, Nuclear Operations written approval or disapproval of items considered under 6.5.1.6.a through d above.
 - b. Render determinations in writing with regard to whether or not each item considered under 6.5.1.6.a through e above constitutes an unreviewed safety question.
 - c. Provide written notification within 24 hours to the Senior Vice President, Nuclear Power Division and the Offsite Review Committee of disagreement between the OSC and the General Manager, Nuclear Operations; however, the General Manager, Nuclear Operations shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

RECORDS

6.5.1.8 The OSC shall maintain written minutes of each meeting and copies shall be provided to the General Manager, Nuclear Operations and Chairman of the Offsite Review Committee.

6.5.2 OFFSITE REVIEW COMMITTEE (ORC)

FUNCTION

6.5.2.1 The ORC shall function to provide independent review and audit of designated activities in the areas of:

- a. nuclear power plant operations
- b. nuclear engineering
- c. chemistry and radiochemistry
- d. metallurgy
- e. instrumentation and control
- f. radiological safety
- g. mechanical and electrical engineering
- h. quality assurance practices

COMPOSITION

6.5.2.2 The chairman and all members of the ORC shall be appointed by the Senior Vice President, Nuclear Power Division. The membership shall consist of a minimum of five individuals who collectively possess a broad based level of experience and competence enabling the committee to review and audit those activities designated in 6.5.2.1 above and to recognize when it is necessary to obtain technical advice and counsel. An individual may possess expertise in more than one specialty area. The collective competence of the committee will be maintained as changes to the membership are made.

ALTERNATES

6.5.2.3 All alternate members shall be appointed in writing by the ORC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in ORC activities at any one time.

CONSULTANTS

6.5.2.4 Consultants shall be utilized as determined by the ORC Chairman to provide expert advice to the ORC.

MEETING FREQUENCY

6.5.2.5 The ORC shall meet at least once per calendar guarter during the initial year of facility operation following fuel loading and at least once per six months thereafter.

QUORUM

6.5.2.6 A guorum of ORC shall consist of the Chairman or his designated alternate and at least four members including alternates. No more than a minority of the guorum shall have line responsibility for operation of the facility.

REVIEW

6.5.2.7 The ORC shall review:

a. . The safety evaluations for 1) changes to procedures, equipment, or systems and 2) tests or experiments completed under the provision of Section 50.59, 10 CFR, to verify that such actions did not constitute an unreviewed safety question.

REVIEW (Continued)

- Proposed changes to procedures, equipment or systems which b. involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
- C. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
- d. Proposed changes in Technical Specifications or licenses.
- Violations of applicable statutes, codes, regulations, e. orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- Significant operating abnormalities or deviations from f. normal and expected performance of plant equipment that affect nuclear safety.
- All REPORTABLE EVENTS. q.
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of safety-related structures, systems, or components.
- i. Reports and meeting minutes of the OSC.
- The results of the Radiological Environmental Monitoring j. Program prior to submittal of the annual report provided in accordance with Specification 6.9.1.10.

A 'S

6.5.2.8 Audits of facility activities shall be performed under the cognizance of the ORC. These audits shall encompass:

- The conformance of facility operations to provisions a. contained within the Technical Specifications and applicable license conditions.
- The performance, training, and qualifications of the entire b. facility staff.
- The results of actions taken to correct deficiencies C. occurring in facility equipment, structures, systems, cr methods of operation that affect nuclear safety.
- The performance of activities required by the Quality d. Assurance Program to meet the criteria of Appendix "B", 10 CFR 50.

AUDITS (Continued)

- е. Not used.
- Not used. f.
- g. Any other area of facility operation considered appropriate by the ORC or the Senior Vice President, Nuclear Power Division.
- h. The Facility Fire Protection Program and implementing procedures at least once per 24 months.
- An independent fire protection and loss prevention program i. inspection and audit shall be performed at least once per 12 months utilizing either qualified off-site licensee personnel or an outside fire protection firm.
- An inspection and audit of the fire protection and loss 1. prevention program shall be performed by a qualified outside fire consultant at least once per 36 months.
- The OFFSITE DOSE CALCULATION MANUAL and implementing k. procedures.
- The PROCESS CONTROL PROGRAM and implementing procedures for 1. processing and packaging of radioactive waste.

AUTHORITY

6.5.2.9 The ORC shall report to and advise the Senior Vice President, Nuclear Power Division on those areas of responsibility specified in Section 6.5.2.7 and 6.5.2.8.

RECORDS

6.5.2.10 Records of ORC activities shall be prepared, approved and distributed as indicated by the following:

- a. Minutes of each ORC meeting shall be prepared for and approved by the ORC Chairman or Vice Chairman within 14 days following each meeting.
- Reports of reviews encompassed by Section 6.5.2.7 above, b. shall be documented in the ORC meeting minutes.
- Audit reports encompassed by Section 6.5.2.8 above, shall C. be forwarded to the Senior Vice President, Nuclear Power Division and to the management positions responsible for the areas audited within 30 days after completion of the audit.

6.6 REPORTABLE EVENT ACTION

- 6.6.1 The following actions shall be taken for REPORTABLE EVENTS:
 - a. The Commission shall be notified in accordance with 10 CFR 50.72 and/or a report be submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and
 - b. Each REPORTABLE EVENT shall be reviewed by the OSC, and the results of this review shall be submitted to the ORC.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. The facility shall be placed in at least HOT STANDBY within one (1) hour.
- b. The Safety Limit violation shall be reported to the Commission within one hour. The Safety Limit violation shall be reported to the General Manager, Nuclear Operations and to the ORC within 24 hours.
- c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the On-Site Safety Committee (OSC). This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence.
- d. The Safety Limit Violation Report shall be submitted to the Commission, the ORC and the General Manager, Nuclear Operations within 30 days of the violation.

6.8 PROCEDURES

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.
- b. Refueling operations.
- c. Surveillance and test activities of safety related equipment.
- d. Not used.
- e. Not used.

PROCEDURES (Continued)

- Fire Protection Program implementation. f.
- g. PROCESS CONTROL PROGRAM implementation.
- h. OFFSITE DOSE CALCULATION MANUAL implementation.

5.8.2 Each procedure and administrative policy of 6.8.1 above and changes of intent thereto, shall be reviewed by the OSC and approved by the General Manager, Nuclear Operations, predesignated alternate or a predesignated Manager to whom the General Manager, Nuclear Operations has assigned in writing the responsibility for review and approval of specific subjects considered by the committee, as applicable. Changes to procedures and administrative policies of 6.8.1 above that do not receive OSC review, such as correcting typographical errors, reformatting procedures and other changes not affecting the purpose for which the procedure is performed shall receive an independent review by a qualified individual and approved by a designated manager or director.

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

- The intent of the original procedure is not altered. a.
- b. The change is approved by two (2) members of the plant management staff, at least one (1) of whom holds a Senior Reactor Operator's License on the unit affected.
- The change is documented, reviewed by the OSC and approved C. by the General Manager, Nuclear Operations, predesignated alternate or a predesignated Manager to whom the General Manager, Nuclear Operations has assigned in writing the responsibility for review and approval of specific subjects, within 14 days of implementation.

A Post-Accident monitoring program shall be established, 6.8.4 implemented, and maintained. The program will provide the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples following an accident. The program shall include the following:

- (i) Training of personnel,
- (ii) Procedures for sampling and analysis, and
- (iii) Provisions for maintenance of sampling and analysis equipment.

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PROCEDURES (Continued)

6.8.5 A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation shall be implemented. This program shall be described in the station chemistry manual and shall include:

- Identification of a sampling schedule for the critical parameters and control points for these parameters;
- Identification of the procedures used to measure the values of the critical parameters;
- c. Identification for process sampling points;
- d. Procedures for the recording and management of data;
- e. Procedures defining corrective actions for oil control point chemistry conditions; and
- f. A procedure identifying:
 - the authority responsible for the interpretation of the data, and
 - the sequence and timing of administrative events required to initiate corrective action.
- 6.8.6 The following programs shall be established, implemented, and maintained:
 - a. Radioactive Effluent Control 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 from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- .1) 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,
- Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table 2, Column 2,

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PROCEDURES (Continued)

- 3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 or 10 CFR 20.1302, as appropriate, and with the methodology and parameters in the ODCM,
- 4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,
- 5) 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,
- 6) 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 or dose commitment conforming to Appendix I to 10 CFR Part 50,
- 7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table 2, Column 1,
- 8) 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,
- 9) 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 to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
- 10) 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.

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