

JANUARY 25 1978

Docket No. 50-305

Wisconsin Public Service Corporation
ATTN: Mr. E. W. James
Senior Vice President
Post Office Box 1200
Green Bay, Wisconsin 54305

Gentlemen:

The Commission has issued the enclosed Amendment No. 19 to Facility Operating License No. DPR-43 for the Kewaunee Nuclear Power Plant. This amendment consists of changes to the Technical Specifications in response to your request dated October 28, 1977.

The amendment revises the Technical Specifications to: (1) provide updated organizational charts of the licensee's corporate nuclear staff and the Kewaunee plant; (2) redefine the composition of the Nuclear Safety Review and Audit Committee, (3) delete the requirement for an Annual Operating Report, (4) make minor changes to reporting requirements for radioactive effluent releases and (5) delete Section 6.12 of the Technical Specifications titled Respiratory Protection Program.

Copies of the Safety Evaluation and Notice of Issuance are also enclosed.

Sincerely,

Original Signed By

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:

1. Amendment No. 19 to License DPR-43
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosure:
see next page

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SURNAME →	DNeighbors:acr	J. Lawrence	ASchwencer	TJ Carter		
DATE →	1/25/78	1/25/78	1/25/78	1/25/78		

January 25, 1978

cc: Steven E. Keane, Esquire
Foley, Sammond & Lardner
777 East Wisconsin Avenue
Milwaukee, Wisconsin 53202

Bruce W. Churchill, Esquire
Shaw, Pittman, Potts & Trowbridge
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Kewaunee Public Library
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Kewaunee, Wisconsin 54216

Mr. Donald L. Quistorff
Chairman Kewaunee County Board
Kewaunee County Courthouse
Kewaunee, Wisconsin 54216

Mr. Lester Huber
Chairman, Town of Carlton
Route 1
Kewaunee, Wisconsin 54216

Chairman
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Chief, Energy Systems
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U. S. Environmental Protection Agency
Federal Activities Branch
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

WISCONSIN PUBLIC SERVICE CORPORATION

WISCONSIN POWER AND LIGHT COMPANY

MADISON GAS AND ELECTRIC COMPANY

DOCKET NO. 50-305

KEWAUNEE NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 19
License No. DPR-43

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Wisconsin Public Service Corporation, Wisconsin Power and Light Company and Madison Gas and Electric Company (the licensee) dated October 28, 1977, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Facility License No. DPR-43 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 19, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 25, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 19

FACILITY OPERATING LICENSE NO. DPR-43

DOCKET NO. 50-305

Remove the following pages and replace with identically numbered pages:

TS 6-1
TS 6-2
TS 6-3
TS 6-4
TS 6-5
TS 6-6
TS 6-7
TS 6-8
TS 6-9
TS 6-10
TS 6-11
TS 6-12
TS 6-13
TS 6-14
TS 6-15
TS 6-16
TS 6-17
TS 6-18
TS 6-19
TS 6-20
TS 6-21
TS 6-22
TS 6-23
TS 6-24
TS 6-25
TS 6-26
TS 6-27
Table TS 3.5-1

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Plant Superintendent has overall on-site responsibility for plant operation. In the absence of the Plant Superintendent, the succession to this responsibility shall be in the following order:

- a. Assistant Superintendent - Maintenance
- b. Assistant Superintendent - Operations
- c. Operations Supervisor
- d. Technical Supervisor

6.2 ORGANIZATION

OFFSITE

6.2.1 The offsite organization for plant management and technical support shall be as shown on Figure TS 6.2-1.

FACILITY STAFF

6.2.2 The plant organization shall be as shown on Figure TS 6.2-2 and:

- a. Each on-duty shift complement shall consist of at least:
 - (1) One Shift Supervisor (SRO)
 - (2) Two licensed Reactor Operators
 - (3) One Auxiliary Operator
 - (4) One Equipment Operator
- b. In the event that one of the shift members becomes incapacitated due to illness or injury, reactor operations may continue with the reduced complement until his replacement arrives. In all but severe weather conditions, a replacement is required within two hours.

- c. At least one licensed operator shall be in the control room when fuel is in the reactor.
- d. At least two licensed operators shall be present in the control room during reactor startup, turbine generator synchronization to the grid, and during recovery from reactor trips.
- e. An individual qualified in radiation protection procedures shall be on site when fuel is in the reactor. This individual may be one of the shift operators.
- f. Refueling operations shall be directed by a licensed Senior Reactor Operator assigned to the refueling operation who has no other concurrent responsibilities during the refueling operation.

6.3 PLANT STAFF QUALIFICATIONS

- 6.3.1 Qualifications of each member of the Plant Staff shall meet or exceed the minimum acceptable levels of ANSI-N18.1-1971 for comparable positions.

6.4 TRAINING

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

6.5 REVIEW AND AUDIT

6.5.1 PLANT OPERATIONS REVIEW COMMITTEE (PORC)

FUNCTION

- 6.5.1.1 The PORC shall function to advise the Plant

Superintendent on all matters related to nuclear safety.

COMPOSITION

6.5.1.2 The PORC shall be composed of, but not necessarily limited to:

Chairman: Plant Superintendent
Required Members: Assistant Superintendent-
Maintenance
Assistant Superintendent-
Operations
Operations Supervisor
Reactor Supervisor
Technical Supervisor
Plant Performance Engineer

ALTERNATES

6.5.1.3 Alternate members shall be appointed in writing by the PORC Chairman to serve on a temporary basis; however, no more than two alternates shall participate in PORC meetings at any one time.

MEETING FREQUENCY

6.5.1.4 The PORC shall meet at least once per calendar month and as convened by the Chairman.

QUORUM

6.5.1.5 A quorum of the PORC shall consist of the Chairman or his designated successor plus three members of which not more than two shall be alternates.

RESPONSIBILITIES

6.5.1.6 The PORC shall be responsible for:

- a. Review proposed normal, abnormal and emergency operating procedures. Review of all proposed maintenance procedures and proposed changes to those procedures; and any other proposed procedures or changes thereto as determined by the Plant Superintendent to affect nuclear safety.
- b. Review of all proposed tests and experiments that affect nuclear safety.
- c. Review of all proposed changes to the Technical Specifications.
- d. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.
- e. Review all reports covering the investigation of all violations of the Technical Specifications and the recommendations to prevent recurrence.
- f. Review plant operations to detect potential safety hazards.
- g. Performance of special reviews and investigations and prepare reports thereon as requested by the Chairman of the Nuclear Safety Review and Audit Committee.
- h. Review of the Security Plan and Emergency Plan and their respective implementing procedures and shall submit recommended

changes to the Superintendent-
Nuclear Power.

AUTHORITY

6.5.1.7 The PORC shall:

- a. Recommend to the Plant Superintendent approval or disapproval of items considered under 6.5.1.6a through d above.
- b. Make determinations with regard to whether or not each item considered under 6.5.1.6a through e above constitutes an unreviewed safety question.
- c. Provide immediate notification in the form of draft meeting minutes to the Superintendent-Nuclear Power and the Chairman-Nuclear Safety Review and Audit Committee of disagreement between the PORC and the Plant Superintendent. The Plant Superintendent shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

RECORDS

6.5.1.8 Minutes shall be kept of all meetings of the PORC and copies shall be sent to the Superintendent-Nuclear Power and the Chairman-Nuclear Safety Review and Audit Committee.

6.5.2 CORPORATE NUCLEAR ENGINEERING STAFF (CNES)

FUNCTION

6.5.2.1 The CNES shall function to provide engineering,

technical and quality assurance activities in support of the Kewaunee Plant Staff.

ORGANIZATION

6.5.2.2 The CNES consists of the following groups:

- a. Licensing and Nuclear Systems
- b. Nuclear Services
- c. Steam Plant Engineering
- d. Quality Assurance
- e. Power Plant Design
- f. Document Control

ACTIVITIES

- 6.5.2.3
1. Investigate and report all violations of the Technical Specifications, codes, regulations, and statutes.
 2. Review all activities associated with nuclear safety for technical adequacy and compliance with internal procedures or instructions.
 3. Investigate and report significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
 4. Investigate and report all events which are required by regulations or Technical Specifications to be reported to the NRC in writing within 24 hours.
 5. Investigate any indication of an unanticipated deficiency in some aspect of design or operation of safety related structures, systems or components.

6. Review and/or prepare safety evaluations of all plant design changes.
7. Audits as required by the Quality Assurance Program and as outlined in Section 6.5.3.8.

AUTHORITY

6.5.2.4 Quality Assurance is responsible to the Vice President-System Planning and Engineering. Steam Plant Engineering and Power Plant Design, although not directly responsible to the Superintendent-Nuclear Power, are available for special projects and support as it applies to the Kewaunee Plant. The remainder of the CNES is responsible to the Superintendent-Nuclear Power.

6.5.3 NUCLEAR SAFETY REVIEW AND AUDIT COMMITTEE (NSRAC)

6.5.3.1 The NSRAC 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 Radio-Chemistry
- d. Metallurgy
- e. Instrumentation and control
- f. Radiological Safety
- g. Mechanical and Electrical Engineering
- h. Quality Assurance Practices
- i. Other appropriate fields as determined by the Committee, to be associated with the unique characteristics of the nuclear power plant.

COMPOSITION

6.5.3.2 The NSRAC shall be composed of, but not necessarily limited to:

- a. At least three technically qualified persons who are not members of the plant staff, one of whom will be Chairman.
- b. One member from the supervisory staff of the plant.
- c. At least two qualified non-company affiliated technical consultants.
- d. Plus in-house staff management advisors as required.

The Committee membership and its Chairman and Vice Chairman shall be appointed by the Senior Vice-President - Power Supply & Engineering or such person as he shall designate. Each member of the NSRAC shall have an academic degree in an engineering or physical science field; and in addition, shall have a minimum of five years technical experience, of which a minimum shall be in one or more areas given in 6.5.3.1.

ALTERNATES

- 6.5.3.3 Alternate members shall be appointed by the NSRAC Chairman, upon approval by the Senior Vice President - Power Supply and Engineering, to serve on a temporary basis; however, no more than two alternates shall participate in NSRAC activities at any one time.

CONSULTANTS

- 6.5.3.4 Consultants may be utilized as determined by the Chairman - NSRAC to provide expert advice to the NSRAC.

MEETING FREQUENCY

- 6.5.3.5 The NSRAC shall meet at least once per calendar quarter during the initial year of plant operation following fuel loading and at least once per six months thereafter.

QUORUM

6.5.3.6 A quorum of the NSRAC shall consist of the Chairman or Vice Chairman and four members including alternates. No more than a minority of the quorum shall have line responsibility for operation of the plant.

REVIEW

6.5.3.7 The NSRAC shall review:

- a. The safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of 10 CFR 50.59 , to verify that such actions did not constitute an unreviewed safety question.
- b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in 10 CFR 50.59.
- c. Proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59.
- d. Proposed changes in Technical Specifications or licenses.
- e. Reports covering violations of applicable statutes, codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- f. Reports covering significant operating

abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.

- g. Reports covering all events which are required by regulations or Technical Specifications to be reported to the NRC in writing within 24 hours.
- h. Reports covering any indication 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 PORC.

AUDITS

6.5.3.8 Audits of plant activities shall be performed under the cognizance of the NSRAC; these audits shall include:

- a. Conformance of plant operation to all provisions contained within the Technical Specifications and applicable license conditions at least annually.
- b. Performance, training and qualifications of the entire plant staff at least annually.
- c. Results of all actions taken to correct deficiencies occurring in plant equipment, structures, systems or method of operation that affect nuclear safety at least semi-annually.
- d. Performance of all activities required by the Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once every two years.

- e. Plant Emergency Plan and Security Plan and their implementing procedures at least once every two years.
- f. Any other area of plant operation considered appropriate by the NSRAC or the Senior Vice President - Power Supply & Engineering.

AUTHORITY

6.5.3.9 The NSRAC shall report to and advise the Senior Vice President - Power Supply & Engineering on those areas of responsibility specified in Section 6.5.3.7 and 6.5.3.8.

RECORDS

- 6.5.3.10 Records of NSRAC activities shall be prepared, approved and distributed as follows:
- a. Minutes of each NSRAC meeting forwarded to the Senior Vice President - Power Supply & Engineering within 14 days following each meeting.
 - b. Reports of reviews required by Section 6.5.3.7e, f, g and h above, forwarded to the Senior Vice President - Power Supply & Engineering within 14 days following completion of the review.
 - c. Reports of audits performed by NSRAC shall be forwarded to the Senior Vice President - Power Supply & Engineering and to the management positions responsible for the areas audited within 30 days after completion of the audit.

6.6 DELETED

6.7 SAFETY LIMIT VIOLATION

- 6.7.1 The following actions shall be taken in the event a safety limit is violated:
- a. The reactor shall be shutdown and operation shall not be resumed until authorized by the Commission.
 - b. The Safety Limit violation shall be reported to the Commission, the Superintendent-Nuclear Power, and to the NSRAC-Chairman.
 - c. The Report shall be prepared in accordance with Section 6.9 of the Technical Specifications.

6.8 PROCEDURES

- 6.8.1 Written procedures and administrative policies shall be established, implemented and maintained that meet the requirements and recommendations of Section 5.1 and 5.3 of ANSI N18.7-1972.
- 6.8.2 Each procedure and administrative policy of 6.8.1 above, and changes thereto, shall be reviewed by the Plant Superintendent prior to implementation and periodically as determined by the Plant Superintendent.
- 6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:
- a. The intent of the original procedure is not altered.
 - b. The change is approved by two members of the Plant Management Staff, at least one of which holds a Senior Reactor Operator's License, if the procedure affects nuclear safety.
 - c. The change is documented, reviewed by the PORC, and approved by the Plant Superintendent.

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 Director of the appropriate Regional Office of Inspection and Enforcement unless otherwise noted.

6.9.1 Routine Reports

a. Startup Report

A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant. The report shall address each of the tests identified in the FSAR and shall in general include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events

(i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

b. Annual Reporting Requirements

Routine operating reports covering the operation of the unit during the previous calendar year shall be submitted prior to March 1 of each year. Items reported in this category include:

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions,⁽¹⁾ e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. 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 shall be assigned to specific major work functions.

(1) This tabulation supplements the requirements of Section 20.407 of 10 CFR Part 20.

c. Monthly Operating Report

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the Director, Office of Management Information and Program Control, U. S. Nuclear Regulatory Commission, Washington, D. C., 20555, with a copy to the appropriate Regional Office, to be submitted by the fifteenth of each month following the calendar month covered by the report.

6.9.2 Reportable Occurrences

Reportable occurrences, including corrective actions and measures to prevent recurrence, shall be reported to the NRC. Supplemental reports may be required to fully describe final resolution of occurrence. In case of corrected or supplemental reports, a licensee event report shall be completed and reference shall be made to the original report date.

a. Prompt Notification with Written Followup

The types of events listed below shall be reported as expeditiously as possible, but within 24 hours by telephone and confirmed by telegraph, mailgram, or facsimile transmission to the Director of the appropriate Regional Office, or his designate no later than the first working day following the event, with a written followup report within two weeks.

The written followup report shall include, as a minimum, a completed copy of a licensee event report form.

Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

(1) Failure of the reactor protection system or other

systems subject to limiting safety system settings to initiate the required protective function by the time a monitored parameter reaches the setpoint specified as the limiting safety system setting in the technical specifications or failure to complete the required protective function.

Note: Instrument drift discovered as a result of testing need not be reported under this item but may be reportable under items 6.9.2.a(5), 6.9.2.a(6), or 6.9.2.b(1) below.

- (2) Operation of the unit or affected systems when any parameter or operation subject to a limiting condition is less conservative than the least conservative aspect of the limiting condition for operation established in the technical specifications.

Note: If specified action is taken when a system is found to be operating between the most conservative and the least conservative aspects of a limiting condition for operation listed in the technical specifications, the limiting condition for operation is not considered to have been violated and need not be reported under this item, but it may be reportable under item 6.9.2.b(2).

- (3) Abnormal degradation discovered in fuel cladding, reactor coolant pressure boundary, or primary containment.

Note: Leakage of valve packing or gaskets within the limits for identified leakage set forth in technical specifications need not be reported under this item.

- (4) Reactivity anomalies involving disagreement with the predicted value of reactivity balance under

that have or could have permitted reactor operation in a manner less conservative than assumed in the analyses.

- (9) Performance of structures, systems, or components that requires remedial action or corrective measures to prevent operation in a manner less conservative than assumed in the accident analyses in the safety analysis report or technical specifications bases; or discovery during plant life of conditions not specifically considered in the safety analysis report or technical specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

Note: This item is intended to provide for reporting of potentially generic problems.

b. Thirty Day Written Reports

The reportable occurrences discussed below shall be the subject of written reports to the Director of the appropriate Regional Office within thirty days of occurrence of the event. The written report shall include, as a minimum, a completed copy of a licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- (1) Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the technical specifications but which do not prevent the fulfillment of the functional

requirements of affected systems.

- (2) Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.

Note: Routine surveillance testing, instrument calibration, or preventative maintenance which require system configurations as described in items 6.9.2.b(1) and 6.9.2.b(2) need not be reported except where test results themselves reveal a degraded mode as described above.

- (3) Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems.
- (4) Abnormal degradation of systems other than those specified in item 6.9.2.a(3) above designed to contain a radioactive material resulting from the fission process.

Note: Sealed sources or calibration sources are not included under this item. Leakage of valve packing or gaskets within the limits for identified leakage set forth in technical specifications need not be reported under this item.

6.9.3 Unique Reporting Requirements

a. Annual Environmental Operating Reports

- (1) For each medium sampled during the reporting period, e.g., air, lake bottom, surface water, soil, fish, include:

- (a) Number of sampling locations,

- (b) Total number of samples,
 - (c) Number of locations at which levels are found to be significantly above local backgrounds.
 - (d) Highest, lowest, and the average concentrations or levels of radiation for the sampling point with the highest average and description of the location of that point with respect to the site.
- (2) If levels of radioactive materials in environmental media as determined by an environmental monitoring program indicate the likelihood of public intakes in excess of 1% of those that could result from continuous exposure to the concentration values listed in Appendix B, Table II, Part 20, estimates of the likely resultant exposure to individuals and to population groups, and assumptions upon which estimates are based shall be provided.
- (3) If statistically significant variations of offsite environmental concentrations with time are observed, correlation of these results with effluent release shall be provided.

b. Radioactive Effluent Releases

A statement of the quantities of radioactive effluents released from the plant, with data summarized on a monthly basis following the format of USNRC Regulatory Guide 1.21 and submitted on a semiannual basis.

(1) Gaseous Effluents

(a) Gross Radioactivity Releases

- (i) Total gross radioactivity (in curies), excluding halogens and particulates with half-lives longer than eight days.

- (ii) Total radioactivity (in curies) by nuclide released based on representative isotopic analyses performed.
- (iii) Percent of the quarterly technical specification limit for gross gaseous activity.

(b) Iodine Releases

- (i) Total iodine radioactivity (in curies) by nuclide released, based on representative isotopic analyses performed.
- (ii) Average release rate (in microcuries/second) for I-131.
- (iii) Percent of technical specification limit for I-131 released.

(c) Particulate Releases

- (i) Total radioactivity (in curies) of nuclides with half-lives greater than eight days.
- (ii) Maximum radioactive release rate over any one hour period of halogens and particulates with half-lives greater than eight days.
- (iii) Percent of technical specification limits for halogens and particulates with half-lives greater than eight days.
- (iv) Gross alpha radioactivity released (in curies) excluding background radioactivity.

(d) Tritium Releases

- (i) Total tritium released during the reporting periods.
- (ii) Average release rate (uci/sec) of tritium.
- (iii) Percent of appropriate technical specification limit for tritium released.

(2) Liquid Effluents

- (a) Total gross radioactivity released (in curies) excluding tritium, dissolved gases and alpha, and average concentration released to the unrestricted area.
- (b) The maximum concentration of gross radioactivity, excluding tritium, dissolved gases and alpha, released to the unrestricted area (averaged over the period of release).
- (c) Total tritium and total alpha radioactivity (in curies) released and average concentration released to the unrestricted area.
- (d) Total dissolved gas radioactivity (in curies) and average concentration released to the unrestricted area.
- (e) Total volume (in liters) of liquid waste released prior to dilution.
- (f) Total volume (in liters) of dilution water used prior to release from the restricted area.
- (g) Total gross radioactivity (in curies) by nuclide released, based on representative isotopic analyses performed.
- (h) Percent of technical specification limit for total radioactivity release rate.

(3) Solid Waste Shipped

- (a) The total amount of solid waste packaged (in cubic meters).
- (b) The total estimated radioactivity (in curies) involved.

- (c) Disposition including date and destination if shipped offsite.

c. Safety Class I Inservice Inspection

Sixty days after the completion of the first re-fueling outage.

6.10 RECORD RETENTION

6.10.1 The following records shall be retained for at least five years:

- a. Records and logs of plant operation, including power levels and periods of operation at each power level.
- b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment pertaining to nuclear safety.
- c. Reports of all events which are required by regulations or Technical Specifications to be reported to the NRC in writing within 24 hours.
- d. Records of periodic checks, inspections, and calibrations required by these Technical Specifications.
- e. Records of nuclear safety related tests or experiments.
- f. Records of radioactive shipments.
- g. Records of changes to operating procedures.
- h. Records of sealed source leak tests and results.
- i. Records of annual physical inventory of all source material of record.
- j. Records of Quality Assurance activities required by the QA Manual except where it is determined that the records should be maintained for a longer period of time.

6.10.2 The following records shall be retained for the duration of the Plant Operating License.

- a. Records of a complete set of as-built drawings for the plant as originally licensed and all print changes showing modifications made to the plant.
- b. Records of new and spent fuel inventory, fuel transfers, and assembly burnup histories.
- c. Records of plant radiation and contamination surveys.
- d. Records of radiation exposure of all plant personnel, and others who enter radiation control areas.
- e. Records of radioactivity in liquid and gaseous wastes released to the environment.
- f. Records of transient or operational cycles for these facility components.
- g. Records of training and qualification for current members of the plant staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of meetings of the NSRAC and PORC.

6.11 RADIATION PROTECTION PROGRAM

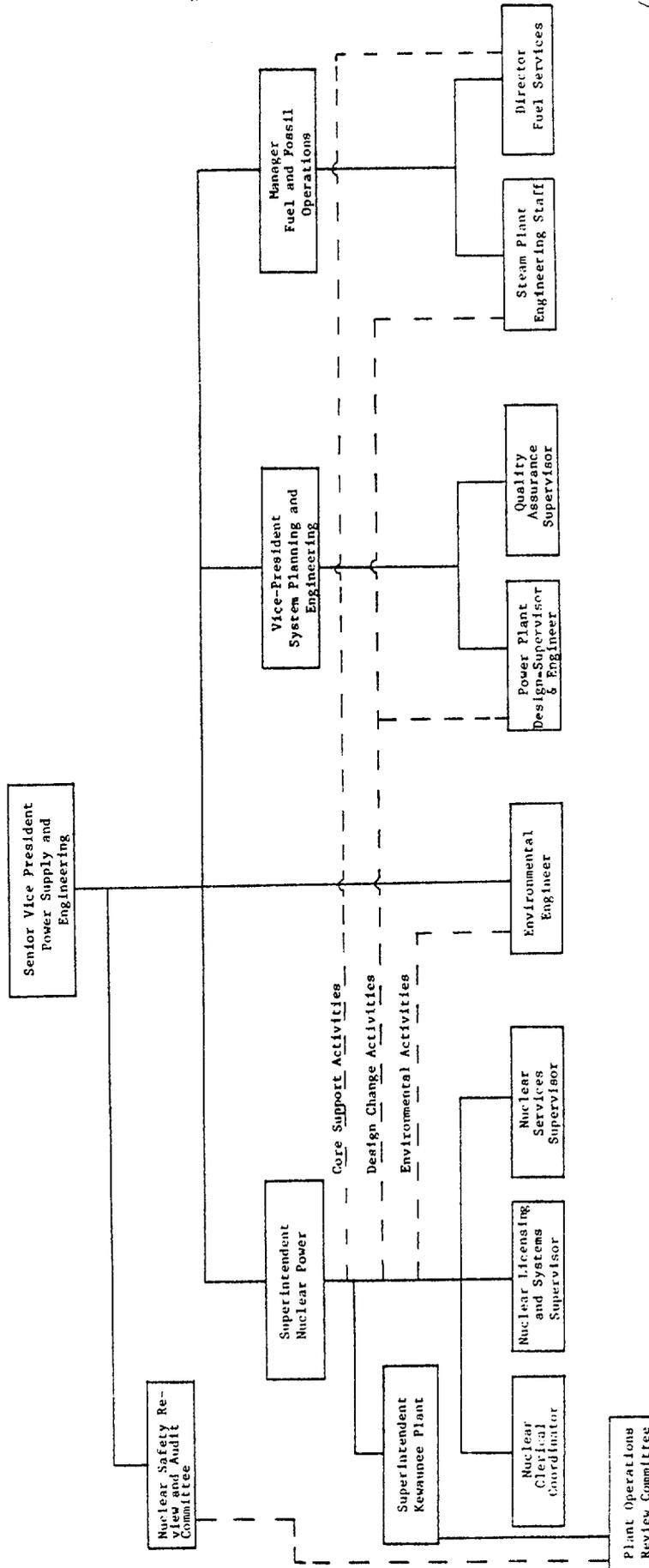
Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 DELETED

6.13 HIGH RADIATION AREA

6.13.1 In lieu of the "control device" or "alarm signal" required by Paragraph 20.203 (c) (2):

- a. Each High Radiation Area in which the intensity of radiation is greater than 100 mrem/hr, but less than 1000 mrem/hr, 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 and any individual or group of individuals permitted to enter such areas shall be provided with a radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. Each High Radiation Area in which the intensity of radiation is greater than 1000 mrem/hr shall be subject to the provisions of 6.13.1.a above, and in addition locked doors shall be provided to prevent unauthorized entry into these areas. The areas shall be maintained under the administrative control of the Shift Supervisor on duty.

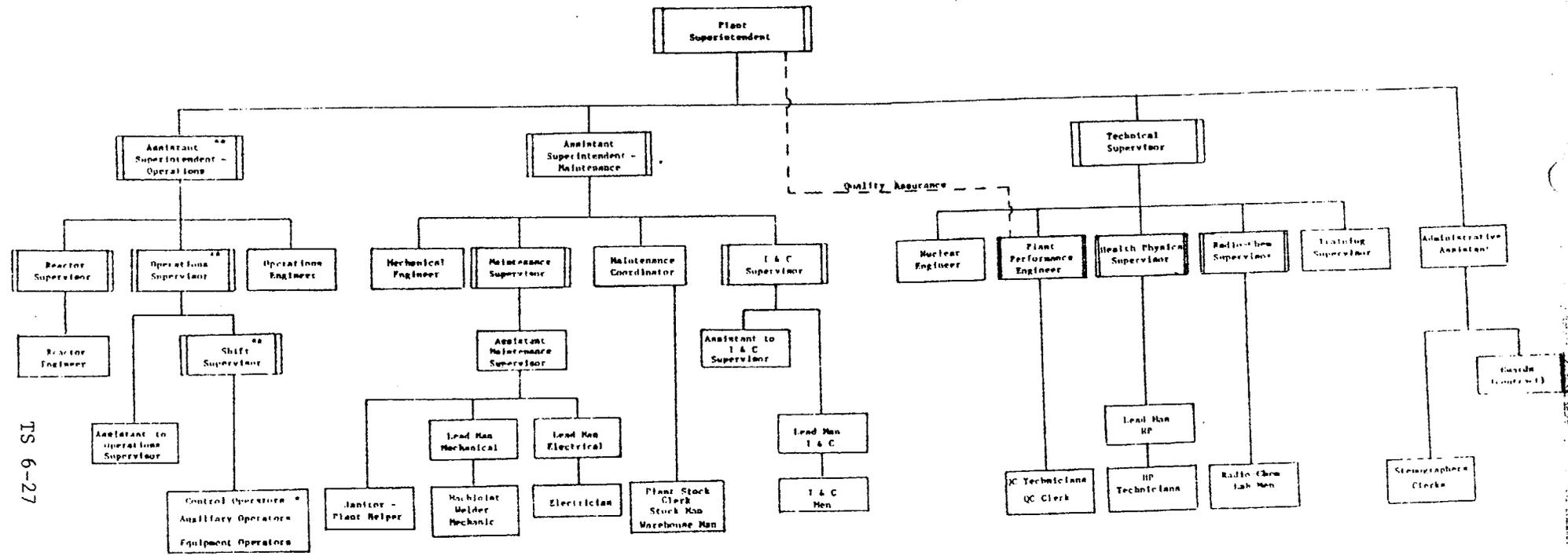


FUNCTIONAL ORGANIZATION
 POWER SUPPLY AND ENGINEERING DEPARTMENT
 WISCONSIN PUBLIC SERVICE CORPORATION

Direct Line
 Responsibility
 Coordination/
 Communication

TS 6-27

KEWAUNEE NUCLEAR POWER PLANT
 ORGANIZATION CHART UNIT NO. 1
 WISCONSIN PUBLIC SERVICE CORPORATION



- Operating Shift Complement (5)
- 1 Shift Supervisor
 - 1 A Control Operator
 - 1 B Control Operator
 - 1 Auxiliary Operator
 - 1 Equipment Operator

Key or Technical Personnel

*Reactor Operator License
 **Senior Reactor Operator License

FIGURE TS 6.2-3

Amendment No. 19

TABLE TS 3.5-1

ENGINEERED SAFETY FEATURES INITIATION INSTRUMENT SETTING LIMITS

<u>NO.</u>	<u>FUNCTIONAL UNIT</u>	<u>CHANNEL</u>	<u>SETTING LIMIT</u>
1	High Containment Pressure (Hi)	Safety Injection*	≤ 4 psig
2	High Containment Pressure (Hi-Hi)	a. Containment Spray	≤ 23 psig
		b. Steam Line Isolation of Both Lines	≤ 17 psig
3	Pressurizer Low Pressure and Low Level	Safety Injection*	≥ 1815 psig
			$\geq 5\%$ (of distance) between the instrument taps
4	Low Steam Line Pressure	Safety Injection*	≥ 500 psig
		Lead Time Constant	≥ 12 seconds
		Lag Time Constant	≤ 2 seconds
5	High Steam Flow in a Steam Line Coincident with Safety Injection and Low T_{avg}	Steam Line Isolation of Affected Line **	d/p corresponding to $< 0.745 \times 10^6$ lb/hr at 1005 psig $\geq 540^\circ\text{F}$
6	High-High Steam Flow in a Steam Line Coincident with Safety Injection	Steam Line Isolation of Affected Line **	$< d/p$ corresponding to 4.5×10^6 lb/hr at 735 psig
7	Forebay Level	Trip circ. water pumps	

*Initiates containment isolation, feedwater line isolation, shield building ventilation, auxiliary building special vent, and starting of all containment fans. In addition, the signal overrides any bypass on the accumulator valves.

** Confirm main steam isolation valves closure within 5 seconds when tested
d/p = differential pressure

Table TS3.5-1

Amendment No. 19



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 19 TO FACILITY LICENSE NO. DPR-43

WISCONSIN PUBLIC SERVICE CORPORATION

WISCONSIN POWER AND LIGHT COMPANY

MADISON GAS AND ELECTRIC COMPANY

KEWAUNEE NUCLEAR POWER PLANT

DOCKET NO. 50-305

Introduction

By letter dated October 28, 1977, Wisconsin Public Service Corporation (the licensee), requested changes to the Technical Specifications incorporated in the Kewaunee Nuclear Power Plant operating license.

Discussion

The proposed changes would: (1) provide updated organizational charts of the licensee's corporate nuclear staff and the Kewaunee plant; (2) redefine the composition of the Nuclear Safety Review and Audit Committee, (3) delete the requirement for an Annual Operating Report, (4) make minor changes to reporting requirements for radioactive effluent releases and (5) delete Section 6.12 of the Technical Specifications titled Respiratory Protection Program.

Evaluation

1. Organizational Changes

The organizational charts for the corporate nuclear staff of Wisconsin Public Service and the Kewaunee Plant would show the revised corporate reporting structure and additional personnel involved in the nuclear organization.

We have reviewed this proposed change and find it to be administrative and without adverse affect on the responsibility and authority of the organizational personnel involved. We find this change to be acceptable.

2. Nuclear Safety Review and Audit Committee (NSRAC)

This change as proposed by the licensee would delete the title defining the membership of the NSRAC and would define the committee members by qualifications, which would allow for corporate management changes and title changes without the necessity of a Technical Specification change.

We have reviewed this proposed change and found that the licensee had not specified minimum qualification requirements for the committee members. Based on subsequent discussion, the licensee has agreed to the following qualification requirements:

"Each member of the NSRAC shall have an academic degree in an engineering or physical science field; and in addition, shall have a minimum of five years technical experience, of which a minimum shall be in one or more areas given in 6.5.3.1."

With these words added to the Technical Specifications, these qualification requirements would be consistent with those of other licensees' review and audit committees that do not list the members by title. We find this change to be acceptable.

3. Reporting Requirements

Regulatory Guide 1.16, "Reporting of Operating Information - Appendix A Technical Specifications", is the basis for reporting requirements found in Technical Specifications today. When these Technical Specifications were issued we requested that licensees use the formats in the guide for the Licensee Event Report (LER) and Monthly Operating Report. In some cases licensees' use of these formats was required by a reference to Regulatory Guide 1.16 in the Technical Specifications. After two years of experience with the reporting requirements identified in this guide we reviewed the scope of information licensees are required to submit in the LER, Annual Operating Report, Monthly Operating Report and Startup Report.

Based on our review of LER's we developed a modified format for the LER to make this document more useful for evaluation purposes. By letters sent in July and August 1977, we informed licensees of the new LER format and requested that they use it. For those licensees who reference Regulatory Guide 1.16 in their Technical Specifications we also requested that they propose a change which would replace this reference with appropriate words from the guide and which would delete mandatory use of the reporting forms contained in the guide.

From our review of all licensee reports we determined that much of the information found in the Annual Operating Report either is addressed in the LER's or Monthly Operating Reports, which are submitted in a more timely manner, or could be included in these reports with only a slight augmentation of the information already supplied. Therefore we concluded that the Annual Operating Report could be deleted as a Technical Specification requirement if certain additional information were provided in the Monthly Operating Reports. As a result we sent letters during September 1977 to licensees informing them that a revised and improved format for Monthly Operating Reports was available and requested that they use it. For those licensees with the Technical Specification reference to Regulatory Guide 1.16 the change deleting this reference, discussed above, would be necessary. In addition, licensees were informed that if they agreed to use the revised format they should submit a change request to delete the requirement for an Annual Operating Report except that occupational exposure data must still be submitted.

All but one of the specified item in the Annual Operating Report will be deleted. The report which tabulates occupational exposure on an annual basis is needed and therefore, the requirement to submit this information has been retained. We have determined that the failed fuel examination information does not need to be supplied routinely by licensees because this type of historical data can be obtained in a compiled form from fuel vendors when needed. The information concerning forced reductions in power and outages will be supplied in the revised Monthly Operating Reports and the narrative summary of operating experience will be provided on a monthly basis in the Monthly Operating Report rather than annually. The licensee has committed to use the revised Monthly Operating Report format beginning with their report for January 1978 as requested. We have concluded that all needed information will be provided and deletion of the Annual Operating Report is acceptable.

4. Radioactive Effluent Releases

The licensee has proposed several minor changes which would reduce the necessity of duplicate measurements between Sections 3.9 and 6.9 of the Technical Specifications. We have reviewed these proposed changes and find the reporting requirements are not reduced. We have made several minor changes which the licensee has concurred with. We find this change to be acceptable.

5. Respiratory Protection Program

The proposal to delete the current respiratory protection requirements from the Technical Specifications would eliminate conflict between the Technical Specifications and 10 CFR §20.103 as revised November 29, 1976. This agrees with the revocation provision in Section 6.12.3 of the current Technical Specifications which requires that Section 6.12 be revoked upon adoption of the proposed change to 10 CFR §20.103. In the future, as specified in the regulations, allowance may be made for the use of respiratory protective equipment only if its use is as stipulated in Regulatory Guide 8.15, Acceptable Programs for Respiratory Protection. Based on the above, we find this change acceptable.

6. Typographical Error

We have also corrected a typographical error on Technical Specification page 3.5-1 brought to our attention by the licensee.

Environmental Consideration

We have determined that this amendment does not authorize a change in effluent types or total amounts nor an increase in the power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact, and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered

and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: January 25, 1978

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-305

WISCONSIN PUBLIC SERVICE CORPORATION

WISCONSIN POWER AND LIGHT COMPANY

MADISON GAS AND ELECTRIC COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 19 to Facility Operating License No. DPR-43 issued to Wisconsin Public Service Corporation, Wisconsin Power and Light Company, and Madison Gas and Electric Company (the licensee) which revised Technical Specifications for operation of the Kewaunee Nuclear Power Plant located in Kewaunee, Wisconsin. The amendment is effective as of the date of issuance.

The amendment revises the Technical Specifications to: (1) provide updated organizational charts of the licensee's corporate nuclear staff and the Kewaunee plant, (2) redefine the composition of the Nuclear Safety Review and Audit Committee, (3) delete the requirements for an Annual Operating Report, (4) make minor changes to reporting requirements for radioactive effluent releases and (5) delete Section 6.12 of the Technical Specifications titled Respiratory Protection Program.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment filed October 28, 1977, (2) Amendment No. 19 to Facility Operating License No. DPR-43, and (3) the Commission's related Safety Evaluation Report. All of these documents are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. 20555, and at the Kewaunee Public Library, 314 Milwaukee Street, Kewaunee, Wisconsin 54216. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 25th day of January 1978.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schweitzer, Chief
Operating Reactors Branch
Division of Operating Reactors