



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

POWER AUTHORITY OF THE STATE OF NEW YORK

DOCKET NO. 50-286

INDIAN POINT NUCLEAR GENERATING UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 116  
License No. DPR-64


1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Power Authority of the State of New York (the licensee) dated December 30, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-64 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 116, 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 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



*Robert A. Capra*

Robert A. Capra, Director  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Amendment:  
Changes to the Technical  
Specifications

Date of Issuance: May 14, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 116

FACILITY OPERATING LICENSE NO. DPR-64

DOCKET NO. 50-286

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INDIAN POINT NUCLEAR GENERATING UNIT NO. 3

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## 6.0 ADMINISTRATIVE CONTROLS

### 6.1 RESPONSIBILITY

6.1.1 The Resident Manager shall be responsible for overall facility operation. During periods when the Resident Manager is unavailable, one of the three General Managers will assume his responsibilities. In the event all four are unavailable, the Resident Manager may delegate this responsibility to other qualified supervisory personnel. The Resident Manager reports directly to the Executive Vice President-Nuclear Generation.

### 6.2 ORGANIZATION

#### 6.2.1 Facility Management and Technical Support

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

- 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 Updated FSAR.
- b) The Resident Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
- c) The Executive Vice President - Nuclear Generation 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 PLANT STAFF

- 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.
- c) At least two Licensed Operators shall be present 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 on site when fuel is in the reactor.
- e) ALL CORE ALTERATIONS 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) A Fire Brigade of at least five members shall be maintained on site at all times. This excludes four members of the minimum shift crew necessary for safe shutdown of the plant and any personnel required for other essential functions during a fire emergency. During periods of cold shutdown the Fire Brigade will exclude two members of the minimum shift crew.

g) Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the unit is operating. (Operating personnel are defined as on shift senior reactor operators, reactor operators, nuclear plant operators, shift technical advisors and shift contingency health physicists, I&C and maintenance personnel.) 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 modification on a temporary basis the following guidelines shall be followed:

1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
2. 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 7-day period, all excluding shift turnover time.
3. A break of at least 8 hours should be allowed between work periods, including shift turnover time.
4. 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 Resident Manager or his designee, or higher levels of management, in accordance with established procedures.

- h) At least one individual holding a Senior Reactor Operator (SRO) license shall be on duty in the Control Room at all times.
- i) The Operations Manager, Shift Supervisor and Senior Reactor Operator shall hold a Senior Reactor Operator (SRO) license. The Reactor Operator shall hold a reactor operator (RO) license.

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION*			
License Category	During Operations Involving Core Alternations	During Cold Shutdown or Refueling Periods	At All Other Times
Senior Operator License	2**	1	2
Operator License	1	1	2
Non-Licensed	(As Required)	1	2
Shift Technical Advisor	None Required	None Required	1

\* Shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of this Table.

\*\* Includes individual with SRO license supervising fuel movement as per Section 6.2.2e.



### 6.3 PLANT STAFF QUALIFICATIONS

6.3.1 Each member of the plant staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the Radiological and Environmental Services Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975 and (2) the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response and analysis of the plant for transients and accidents.

### 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 Manager 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.

6.4.2 A training program for the Fire Brigade shall be maintained under the direction of the Fire Protection and Safety Manager and shall meet or exceed the requirements of Section 27 of the NFPA Code-1976 with the exception of the training program schedule.

6.4.3 A training program for use of the post-accident sampling system shall be maintained to ensure that the plant has the capability to obtain and analyze reactor coolant and containment atmosphere samples under post-accident conditions.

6.4.4 A training program shall be maintained to ensure that the plant has the capability to collect and analyze or measure representative samples of radioactive iodines and particulates in plant gaseous effluent during and following an accident.

### 6.5 REVIEW AND AUDIT

#### 6.5.1 PLANT OPERATING REVIEW COMMITTEE (PORC)

##### FUNCTION

6.5.1.1 The Plant Operating Review Committee shall function to advise the Resident Manager on all matters related to nuclear safety and all matters which could adversely change the plant's environmental impact.



## COMPOSITION

6.5.1.2 The Plant Operating Review Committee shall be composed of the:

Chairman:	Resident Manager
Vice-Chairmen/Members:	General Manager - Operations
	General Manager - Maintenance
	General Manager - Support Services
Member:	Operations Manager
Member:	Technical Services Manager
Member:	Maintenance Manager
Member:	Instrument & Control Manager
Member:	Radiological and Environmental Services Manager
Member:	Site Engineering Manager

## ALTERNATES

6.5.1.3 All 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 as voting members in (PORC) activities 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 PORC Chairman or his designated alternate.

## QUORUM

6.5.1.5 A quorum of the PORC shall consist of the Chairman or one of the three Vice-Chairmen, and five members including alternates. Vice-Chairmen may act as members when not acting as Chairman.

## RESPONSIBILITIES

- 6.5.1.6 The Plant Operating Review Committee shall be responsible for:
- a. Review of 1) all procedures affecting nuclear safety required by Specification 6.8 and changes thereto, and 2) any other proposed procedures or changes thereto as determined by the Resident Manager to affect Nuclear Safety.
  - b. Review of all proposed tests and experiments that affect nuclear safety.

- c. Review of all proposed changes to the Operating License and Technical Specifications.
- d. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.
- e. Review of changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL.
- f. Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence to the Resident Manager, who will forward the report to the Chairman of the Safety Review Committee and Executive Vice President-Nuclear Generation.
- g. Review of all reportable events.
- h. Review of facility operations to detect potential nuclear safety hazards.
- i. Performance of special reviews, investigations or analyses and reports thereon as requested by the Resident Manager or the Chairman of the Safety Review Committee (SRC).
- j. Review of the Plant Security Plan and implementing procedures annually.
- k. Review of the Emergency Plan and implementing procedures annually.
- l. Review of every unplanned onsite release of radioactive material to the environs including the preparation of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Resident Manager and to the Safety Review Committee.

AUTHORITY

- 6.5.1.7 The Plant Operating Review Committee shall:
- a) Recommend to the Resident Manager approval or disapproval of items considered under 6.5.1.6(a) through (e) above.
  - b) Render determinations with regard to whether or not each item considered under 6.5.1.6(a) through (e) above constitutes an unreviewed safety question, as defined in 10 CFR 50.59.

- c) Provide notification within 24 hours to the Chairman of the SRC and the Executive Vice President-Nuclear Generation of disagreement between the PORC and the Resident Manager; however, the Resident Manager shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

#### RECORDS

6.5.1.8 The Plant Operating Review Committee shall maintain minutes of each meeting and copies shall be provided to the Chairman of the SRC and Executive Vice President-Nuclear Generation.

#### 6.5.2 SAFETY REVIEW COMMITTEE (SRC)

##### FUNCTION

6.5.2.1 The SRC 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 engineering
- h. Electrical engineering
- i. Administrative controls and quality assurance practices
- j. Environment
- k. Civil/Structural Engineering
- l. Emergency Planning
- m. Nuclear Licensing
- n. Other appropriate fields associated with the unique characteristics of a nuclear power plant.



## MEMBERSHIP

6.5.2.2 The SRC shall be composed of the following voting members:

Chairman:	Manager-Nuclear Safety Evaluation
Vice-Chairman:	Director-Quality Assurance
Member:	Vice President-Nuclear Operations
Member:	Vice President-Nuclear Engineering
Member:	Vice President-Nuclear Support
Member:	Resident Manager - IP3
Member:	Resident Manager - JAF
Member:	Consultant

## ALTERNATES

6.5.2.3 All alternate members shall be appointed in writing by the SRC Chairman. An Alternate Vice-Chairman shall be appointed in writing by the Executive Vice President-Nuclear Generation if necessary. However, no more than two alternates shall participate as voting members in SRC activities at any one time.

## CONSULTANTS

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

## MEETING FREQUENCY

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

## QUORUM

6.5.2.6 A quorum of SRC shall consist of the Chairman or Vice-Chairman or Alternate Vice-Chairman and four members, including alternates. No more than a minority of the quorum shall have direct line responsibility for the operation of the plant.



REVIEW

6.5.2.7 The SRC 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, 10CFR, 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 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 to Technical Specifications of this Operating License.
- e. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- f. Significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
- g. All REPORTABLE EVENTS.
- 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 meetings minutes of the Plant Operating Review Committee.

## AUDITS

- 6.5.2.8 Audits of facility activities shall be performed under the cognizance of the SRC. These audits shall encompass:
- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions as least once per 12 months.
  - b. The performance, training and qualifications of the entire facility staff at least once per 12 months.
  - c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems or methods of operation that affect nuclear safety at least once per 6 months.
  - d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix "B," 10 CFR 50, at least once per 24 months.
  - e. The Facility Emergency Plan and implementing procedures at least once per 12 months.
  - f. The Facility Security Plan including the Safeguards Contingency Plan and implementing procedures at least once per 12 months.
  - g. Any other area of facility operation considered appropriate by the SRC or the Executive Vice President-Nuclear Generation.
  - h. The Facility Fire Protection Program and implementing procedures at least once per two years.
  - i. A fire protection and loss prevention inspection and audit shall be performed annually utilizing either qualified offsite 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 an outside qualified fire consultant at intervals no greater than 3 years.
  - k. The radiological environmental monitoring program and the results thereof at least once per 12 months.

- l. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months.
- m. The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes at least once per 24 months.

#### AUTHORITY

- 6.5.2.9 The SRC shall report to and advise the Executive Vice President-Nuclear Generation on those areas of responsibility specified in Sections 6.5.2.7 and 6.5.2.8.

#### RECORDS

- 6.5.2.10 Records will be maintained in accordance with ANSI 18.7-1972. The following shall be prepared, approved and distributed as indicated below:
- a. Minutes of each SRC meeting shall be prepared, approved and forwarded to the Executive Vice President-Nuclear Generation within 14 days after the date of the meeting.
  - b. Reports of reviews encompassed by Section 6.5.2.7 above shall be prepared, approved and forwarded to the Executive Vice President-Nuclear Generation within 14 days following completion of the review.
  - c. Audit reports encompassed by Section 6.5.2.8 above, shall be forwarded to the Executive Vice President-Nuclear Generation and to the management positions responsible for the areas audited within 30 days after the completion of the audit.

#### CHARTER

- 6.5.2.11 Conduct of the committee will be in accordance with a charter, approved by the Executive Vice President-Nuclear Generation, setting forth the mechanism for implementation of the committee's responsibilities and authority.

#### 6.6 REPORTABLE EVENT ACTION

- 6.6.1 The following actions shall be taken for REPORTABLE EVENTS:
- a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and



- b. Each REPORTABLE EVENT shall be reviewed by the PORC and a report submitted by the Resident Manager to the Chairman of the SRC and Executive Vice President-Nuclear Generation.

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 shut down and reactor operation shall only be resumed in accordance with the provisions of 10 CFR 50.36(c)(1)(1).
- b. The Safety Limit Violation shall be reported immediately to the Commission. The Chairman of the SRC and Executive Vice President-Nuclear Generation will be notified within 24 hours.
- c. A Safety Limit Violation Report shall be prepared by the PORC. This report shall describe (1) applicable circumstances preceding the occurrences, (2) effects of the occurrence 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 Chairman of the SRC and the Executive Vice President-Nuclear Generation by the Resident Manager.

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, November, 1972.
- b. Refueling operations.
- c. Surveillance and test activities of safety related equipment.
- d. Security Plan implementation.
- e. Emergency Plan implementation.
- f. Process Control Program implementation.
- g. Offsite Dose Calculation Manual implementation.

- h. Post-accident sampling and analysis and maintenance of required equipment.
- i. Collection and analysis or measurement of post-accident radioactive iodine and particulates in plant gaseous effluents and maintenance of required equipment.

6.8.2 Temporary changes to procedures 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 staff, at least one of whom holds a Senior Reactor Operator's License on the unit affected.
- c. The change is documented, reviewed by the PORC and approved by the Resident Manager within 14 days of implementation.

6.8.3 Each procedure of 6.8.1 above, and changes thereto, shall be reviewed by the PORC and approved by the Resident Manager prior to implementation and reviewed periodically as set forth in administrative procedures.

## 6.9 REPORTING REQUIREMENTS

### ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator - Region 1, unless otherwise noted.

### STARTUP REPORT

6.9.1.1 A summary report of appropriate plant testing shall be submitted following (1), an amendment to the license involving a planned increase in power level, (2) installation of fuel that has a different design and (3) modifications that may have significantly altered the nuclear, thermal, or hydraulic performances 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 testing and comparison of these values with acceptance criteria. 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.

6.9.1.2 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 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.

#### ANNUAL RADIATION EXPOSURE REPORTS

6.9.1.3 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 exposures according to work and job functions, <sup>1/</sup> e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special 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 totalling 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.

#### MONTHLY OPERATING REPORT

6.9.1.4 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or safety valves, shall be submitted on a monthly basis to the Director, Office of Resource Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator - Region 1, no later than the 15th of each month following the calendar month covered by the report.

#### ANNUAL REPORTS

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

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<sup>1/</sup> This tabulation supplements the requirements of 20.407 of 10 CFR Part 20



(5) The time duration when the specific activity of the primary coolant exceeded the radiiodine limit.

6.9.1.6 CORE OPERATING LIMITS REPORT

6.9.1.6.a Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following:

1. Axial Flux Difference limits for Specification 3.10.2.
2. Heat Flux Hot Channel Factor and K(Z) for Specification 3.10.2.
3. Nuclear Enthalpy Rise Hot Channel Factor and Power Factor Multiplier for Specification 3.10.2.
4. Shutdown Bank Insertion Limit for Specification 3.10.4.
5. Control Bank Insertion Limits for Specification 3.10.4.

6.9.1.6.b The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by NRC in:

1. WCAP-9272-P-A, "WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY," July 1985 (W Proprietary).  
(Methodology for Specification 3.10.4 - Shutdown Bank Insertion Limit, Control Bank Insertion Limits and 3.10.2 - Nuclear Enthalpy Rise Hot Channel Factor.)
- 2a. WCAP-8385, "POWER DISTRIBUTION CONTROL AND LOAD FOLLOWING PROCEDURES - TOPICAL REPORT," September 1974 (W Proprietary).  
(Methodology for Specification 3.10.2 - Axial Flux Difference (Constant Axial Offset Control).)

- 2b. T. M. Anderson to K. Knell (Chief of Core Performance Branch, NRC) January 31, 1980 -- Attachment: Operation and Safety Analysis Aspects of an Improved Load Follow Package. (Methodology for Specification 3.10.2 - Axial Flux Difference (Constant Axial Offset Control).)
- 2c. NUREG-0800, Standard Review Plan, U.S. Nuclear Regulatory Commission, Section 4.3, Nuclear Design, July 1981. Branch Technical Position CPB 4.3-1, Westinghouse Constant Axial Offset Control (CAOC), Rev. 2, July 1981. (Methodology for Specification 3.10.2 - Axial Flux Difference (Constant Axial Offset Control).)
- 3a. WCAP-9220-P-A, Rev. 1, "WESTINGHOUSE ECCS EVALUATION MODEL-1981 VERSION," February 1982 (W Proprietary). (Methodology for Specification 3.10.2 - Heat Flux Hot Channel Factor.)
- 3b. WCAP-9561-P-A ADD. 3, Rev. 1, "BART A-1: A COMPUTER CODE FOR THE BEST ESTIMATE ANALYSIS OF REFLOOD TRANSIENTS - SPECIAL REPORT: THIMBLE MODELING W ECCS EVALUATION MODFL," July 1986 (W Proprietary). (Methodology for Specification 3.10.2 - Heat Flux Hot Channel Factor.)
- 3c. WCAP-10266-P-A Rev. 2, "THE 1981 VERSION OF WESTINGHOUSE EVALUATION MODEL USING BASH CODE," March 1987, (W Proprietary). (Methodology for Specification 3.10.2 - Heat Flux Hot Channel Factor.)

6.9.1.6.c

The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety limits are met.

6.9.1.6.d

The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

## SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator-Region 1 within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification;

- a. Sealed source leakage on excess of limits (Specification 3.9)
- b. Inoperable Seismic Monitoring Instrumentation (Specification 4.10)
- c. Seismic event analysis (Specification 4.10)
- d. Inoperable plant vent sampling, main steam line radiation monitoring or effluent monitoring capability (Table 3.5-4, items 5, 6 and 7)
- e. The complete results of the steam generator tube inservice inspection (Specification 4.9.C)
- f. Inoperable fire protection and detection equipment (Specification 3.14)
- g. Release of radioactive effluents in excess of limits (Appendix B Specifications 2.3, 2.4, 2.5, 2.6)
- h. Inoperable containment high-range radiation monitors (Table 3.5-5, Item 24)
- i. Radioactive environmental sampling results in excess of reporting levels (Appendix B Specification 2.7, 2.8, 2.9)
- j. Operation of Overpressure Protection System (Specification 3.1.A.8.c)
- k. Operation of Toxic Gas Monitoring Systems (Specification 3.3.H.3.)



6.10

RECORD RETENTION

6.10.1  
years:

The following records shall be retained for at least five

- a. Records and logs of facility operation covering time interval at each power level.
- b. Records and logs of principal maintenance activities, inspection, repair and replacements of principal items of equipment related to nuclear safety.
- c. ALL REPORTABLE EVENTS submitted to the Commission.
- d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.
- e. Records of changes made to Operating Procedures.
- f. Records of radioactive shipments.
- g. Records of sealed source and fission detector leak tests and results.
- h. Records of annual physical inventory of all source material of record.
- i. Records of reactor tests and experiments.

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

- a. Records of any drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
- b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
- c. Records of facility radiation and contamination surveys.  
Records of radiation exposure for all individuals entering radiation control areas.
- e. Records of gaseous and liquid radioactive material released to the environs.

- f. Records of transient or operational cycles for those facility components designed for a limited number of transient cycles.
- g. Records of training and qualifications for current members of the plant staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by the QA manual.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- k. Records of meetings of the PORC and the SRC.
- l. Records for Environmental Qualification which are covered under the provisions of paragraph 6.13.
- m. Records of secondary water sampling and water quality.
- n. Records of analyses required by the radiological environmental monitoring program that would permit evaluation of the accuracy of the analysis at a later date. This should include procedures effective at specified times and records showing that these procedures were followed.
- o. Records of service lives of all safety-related hydraulic snubbers including the date at which the service life comparisons and associated installation and maintenance records.

6.11 RADIATION AND RESPIRATORY PROTECTION PROGRAM

6.11.1 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 as to maintain exposures as far below the limits specified in 10 CFR Part 20 as reasonably achievable. Pursuant to 10 CFR 20.103, allowance shall be made for the use of respiratory protective equipment in conjunction with activities authorized by the operating license for this plant in determining whether individuals in restricted areas are exposed to concentrations in excess of the limits specified in Appendix B, Table I, Column 1 of 10 CFR 20.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203 (c) (2) of 10-CFR 20, each high radiation area in which the intensity of radiation is 1000 mrem/hr or less and 100 mrem/hr or greater 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\*. Any individual or group of individuals permitted to enter such areas shall be provided or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1 above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the plant Radiological and Environmental Services Manager or his designee.

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- \* Health Physics Personnel shall be exempt from the RWP issuance requirements for entries into high radiation areas during the performances of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.



6.13 ENVIRONMENTAL QUALIFICATION

6.13.1 Environmental qualification of electric equipment important to safety shall be in accordance with the provisions of 10 CFR 50.49. Pursuant to 10 CFR 50.49, Section 50.49 (d), the EC Master List identifies electrical equipment requiring environmental qualification.

6.13.2 Complete and auditable records which describe the environmental qualification method used, for all electrical equipment identified in the EQ Master List, in sufficient detail to document the degree of compliance with the appropriate requirements of 10 CFR 50.49 shall be available and maintained at a central location. Such records shall be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.