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Mr. B.C. Rusche	3 signed	37		XX XX	

CLASS	UNCLASS	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO:
	XXX			40	50-305

DESCRIPTION: Ltr notarized 8-4-75 trans the following:

ENCLOSURES: AMDT #9 to OL/DPR-43 consists of changes to Enviro Tech Specs, App. B with Attachment A which discusses reasons for change & evaluation of the Enviro Impact as a result of changes.....

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PLANT NAME: Kewaunee

FOR ACTION/INFORMATION

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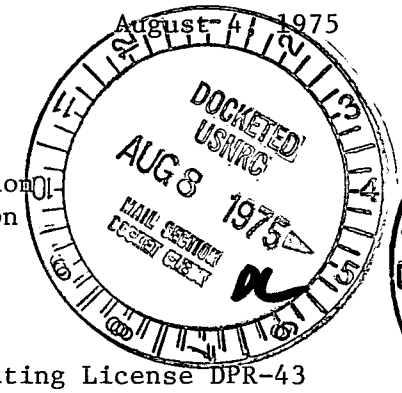
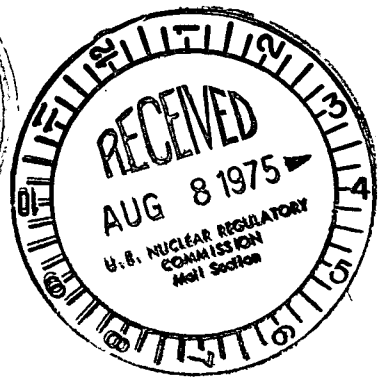
P.O. Box 1200, Green Bay, Wisconsin 54305

Regulatory Docket File

August 4, 1975





Mr. Benard Rusche, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Rusche:

Subject: Amendment No. 9 to Operating License DPR-43
Kewaunee Nuclear Power Plant
Docket 50-305

Reference: a) Letter dated June 27, 1975, Mr. G. W. Knighton to Mr. E. W. James with attachments
b) Letter dated July 11, 1975, Mr. E. W. James to Mr. G. W. Knighton

We submit herewith, thirty-seven (37) copies of Amendment No. 9 to the Technical Specifications, Appendix B, Operating License DPR-43.

This submittal consists of changes to the Environmental Technical Specifications, Appendix B as discussed in the attachments to Reference (a). Attachment A discusses our reasons for change and our evaluation of the Environmental Impact as a result of the changes.

The submitted changes do not include the additional requirements relative to condenser hotwell and other discharges. These items are presently under study by our staff and we will submit our proposed changes in accordance with Reference (b).

Very truly yours,

E. W. James
Senior Vice President
Power Supply & Engineering

EWJ:sna

Subscribed and Sworn to
Before Me This 4th Day
of August, 1975

Notary Public, State of Wisconsin

My Commission Expires
October 6, 1976

8467

ATTACHMENT A

Reason For Change

The ΔT across the condenser is being increased to allow greater flexibility in plant operations during the summer conditions and to allow maintenance to be performed on the circulating water system or pumps without the necessity of shutting down the plant. The increase in maximum discharge temperature limit from 86°F to 89°F is consistent with the present Wisconsin temperature limit and with the requirements for the Point Beach units.

The monitoring of rate of temperature change is tied to scheduled power decreases to allow for changes due to system demand. The condenser discharge monitors have been relocated after operational experience has indicated that variations in temperature measurements existed due to flow patterns and mixing. The present location provides optimum readings of the discharge temperatures.

Experience has indicated that laboratory measurements of solutions taken from the neutralizing tank are more accurate than readings from the installed pH monitor due to excessive maintenance. Since the release of the contents of the tank is a batch operation, sufficient time is provided to permit a thorough analysis of the contents prior to the release.

Various chemicals have been deleted from the treatment chemical inventory since they are no longer used in the operation of the plant.

Weighing and measuring extremely large numbers of an individual species such as alewife and smelt is being discontinued for the following reasons.

a. The various meshes of net used in experiment gill nets are selective to the size of fish they will catch. Alewives and smelt are caught primarily in the 1½" panel net which selects fish from a narrow size range. Weighing and measuring all these fish results in excessive data on one select size group of fish.

b. Data obtained from individual lengths and weights are useful only as indicators of which size groups are most abundant and for determining mean values of lengths and weights and coefficients of condition.

Editorial changes have been made to meet the requirements of Regulatory Guide 1.16 and to reflect changes in the organizational structure within the Company.

Environmental Impact

Results of three (3) years of preoperational and over a year of operational studies have indicated that there has been no deleterious effect on the plant and animal life in the sampling area of Lake Michigan surrounding the Kewaunee Plant. The limits of maximum discharge temperature and fish impingement sampling are consistent with requirements of the State of Wisconsin. Since the studies are continuing, the results will continue to be evaluated on a monthly basis and any change which may have an environmental impact on the Lake will be immediately evaluated and corrective action taken to reduce any potential or apparent impact.

2.0 ENVIRONMENTAL PROTECTION CONDITION

2.1 Thermal

2.1.1 Maximum ΔT across the condenser

Objective: Limit the temperature rise across the condenser.

Specification: During normal power operation, the maximum ΔT across the condenser shall not exceed 22°F when the forebay temperature is greater than 40°F. When the forebay temperature is 40°F or less, the maximum ΔT across the condenser shall not exceed 30°F.

8-4-75

11

Whenever the temperature increment (ΔT) is above the specified limits for more than one hour, action shall be taken to determine the reason for the temperature increase and its expected duration, and corrective action shall be taken to reduce the ΔT to within the specified limits. These occurrences shall be recorded and reported in accordance with the Plant Reporting Requirements.

Bases: The rise of intake water temperature across the condenser is a variable based upon initial condenser design, circulating water pump operation, and the plant's power level.

3.0 MONITORING EQUIPMENT

3.1 Thermal

3.1.1 Maximum ΔT across the condenser

Objective: To monitor the intake and discharge temperatures to assure that the allowable ΔT across the condenser is not exceeded.

Specification: The intake and discharge water temperature shall be measured in an area providing a representative temperature and recorded every hour.

A backup system of temperature measurements of both intake and discharge water shall be provided and recorded hourly when the primary temperature measuring system is out of service.

Bases: The intake and discharge temperature will be monitored and will provide reliable method for determination of temperature differential across the condenser.

Amendment No. 9
Change No. 11
August 1, 1975

2.0 ENVIRONMENTAL PROTECTION CONDITION

2.1.2 Maximum Discharge Temperature

Objective: Limit the maximum temperature of the condenser cooling discharge waters.

Specification: The condenser cooling discharge water shall not exceed 89°F during normal power operation with either one or two circulating water pumps in operation.

11 If the discharge temperature reaches 83°F, appropriate action shall be taken to ensure that 89°F is not exceeded.

Deviation from this specification shall be documented in accordance with the Plant Reporting Requirements.

Bases: The maximum discharge temperature is based upon the Requirements of the Wisconsin Department of
11 Natural Resources and the Federal Water Pollution Control Act Amendments of 1972.

3.0 MONITORING REQUIREMENTS

3.1.2 Maximum Discharge Temperature

Objective: To monitor the circulating water discharge temperature to assure that the allowable discharge temperature is not exceeded.

Specification: The condenser cooling discharge water temperatures shall be monitored and recorded every hour. An alarm shall be provided to denote that discharge temperatures have reached 83°F to alert the operator to take appropriate action to ensure that 89°F is not exceeded. 11

The backup system is the same as described in 3.1.1.

Bases: The maximum discharge temperature will occur at the condenser outlet. Monitoring of the condenser discharge water will ensure an accurate temperature measurement before dilution with the ambient lake water. 11

Amendment No. 9
Change No. 11
August 1, 1975

2.0 ENVIRONMENTAL PROTECTION CONDITION

2.1.3 Rate of Temperature Change of Condenser Cooling Water, ΔT

Objective: To limit the rate of temperature change during normal power operation within the primary cycle, thereby limiting the temperature change of the condenser cooling discharge water.

Specification: The rate of temperature change across the condenser during normal power operation shall not exceed 20°F per hour, during normal power increase, and 15°F per hour during normal power reductions. If these rates are exceeded, appropriate corrective action shall be taken. 11

Deviation from this specification shall be documented in accordance with the Plant Reporting Requirements.

Bases: Environmental studies to date have not indicated any detrimental effects to the aquatic life in the vicinity of the Plant's discharge. Present studies will further document whether the increase in the rate of temperature change across the condenser will result in any detrimental effect on the aquatic life. In the event that effects are evident, the rate of temperature change will be reduced accordingly. 11

3.0 MONITORING REQUIREMENTS

3.1.3 Rate of Temperature Change of Condenser ΔT

Objective: To regulate the rate of load change thereby limiting the temperature change of the condenser cooling discharge water to assure that the allowable rates of change are not exceeded.

Specification: Condenser intake and discharge water shall be monitored under 3.1.1, except that during scheduled power decrease of 25% or greater per hour the intake and discharge temperatures shall be recorded every 15 minutes. 11

Bases: Monitoring of the temperature change across the condenser will ensure representative temperature measurements before dilution of the circulating water with ambient lake water.

Amendment No. 9
Change No. 11
August 1, 1975

2.0 ENVIRONMENTAL PROTECTION CONDITION

2.2 Chemicals

2.2.1 Chlorination of Circulating Water System

Objective: To limit the amount of residual chlorine discharged to the lake.

Specification: Should the circulating water system be chlorinated, the duration of chlorination shall not exceed 2 hours during any 24 hour day. The concentration of the total residual chlorine in the effluent circulating water shall not exceed 0.1 mg/l. Should the total residual chlorine in the effluent exceed 0.1 mg/l, all practicable measures to reduce it to below that level shall be taken.

Bases: Based on the intake water turbidity plus the lack of a need for chlorination during the first 18 months of operation of Point Beach Unit 1, chlorination might not be necessary to control slime in the Kewaunee Plant condenser.

However, should chlorination be necessary, the total residual chlorine in the discharge water should not exceed 0.1 mg/l for a maximum of 2 hours/day. The concentration in the discharge stream is permitted to be twice the 2 hour level in the receiving water in view of the expected rapid decline in concentration after discharge, by dilution and reaction with chlorine demand constituents in the lake. This specification would be consistent with meeting the 0.05 mg/l for a maximum of 2 hours/day recommended by the United States Environmental Protection Agency.

3.0 MONITORING REQUIREMENTS

3.2 Chemicals

3.2.1 Chlorination of the Circulating Water System

Objective: To monitor the amount of total residual chlorine in the discharge water.

Specification: During periods of chlorination, samples of circulating water shall be taken five (5) minutes before and 5 minutes after the start of chlorination, at the mid-point and at the end of the chlorination period.

Samples shall be taken immediately following the condenser and shall be analyzed for total residual chlorine using the amperometric or colorimetric methods of analysis. 11

Bases: The amperometric method of analysis will ensure accurate results which will allow for complete documentation of chlorine residuals in the circulating water system and receiving waters.

The colorimetric method of analysis will serve as a backup should the amperometric titrator fail.

2.0 ENVIRONMENTAL PROTECTION CONDITION

2.2.2 Suspended and Dissolved Solids

Objective: To limit the total amount of solids discharged to the lake.

Specification: The pH of the solution released from the neutralizing tank shall be within the range of 6 to 9 before dilution in the circulating water system.

For normal power operation, the average incremental increase in the concentration of total solids in the circulating water resulting from the neutralizing tank discharge shall not exceed 2.0 mg/l when calculated during periods of each discharge.

The total annual release from the neutralizing tank shall not exceed 325 tons of total solids.

Bases: The demineralizer system consists of twin cation, anion, and mixed bed units used to ensure that the product water is high quality water capable of meeting stringent Nuclear Steam Supply System Specifications.

During normal power operation, it is expected that approximately 22,000 gallons of neutralized waste will be discharged from the primary cation and anion regeneration process once every day while 3600 gallons of neutralized waste from the mixed bed regenerations will be discharged three

3.0 MONITORING REQUIREMENTS

3.2.2 Suspended and Dissolved Solids

Objective: To monitor the total amount of solids discharged to the lake.

Specification: The pH of the solution in the neutralizing tank shall be determined by a representative sample and the resulting pH recorded in the discharge log book. | 11

Prior to release of waste from the neutralizing tank, a representative sample shall be analyzed for suspended, dissolved and total solids. The total amount in gallons released and the time required for discharge shall be recorded.

Bases: Analysis of a representative sample from the waste neutralizing tank, before dilution with the circulating water system, by Standard Methods or its equivalent will ensure that each batch discharged from the neutralizing tank is documented. Laboratory measurement of the pH of the water solution will ensure that the wastes are neutralized before release. | 1

Amendment No. 9
Change No. 11
August 1, 1975

2.0 ENVIRONMENTAL PROTECTION CONDITION

2.2.3 Treatment Chemicals

Objective: To identify and quantify all treatment chemicals.

Specification: The total amounts of all raw chemicals added or used in the plant, identified below, shall be reported annually.

11

1. Primary System
   a. Boric acid
2. Secondary treatment chemicals
   a. Hydrazine
3. Pre-treatment system chemicals
   a. Ferric Sulfate
   b. Lime
   c. Polyelectrolyte
   d. Hypochlorite
   e. Sodium Sulfite
4. Demineralizer System
   a. Caustic Soda
   b. Sulphuric acid
5. Potable Water Softeners
   a. Salt
6. Condenser
   a. Hypochlorite
7. Component Cooling System
   a. Chromates

3.0 MONITORING REQUIREMENTS

3.2.3 Treatment Chemicals

Objective: To monitor the total amount of treatment chemicals discharged to the circulating water.

Specification: A record shall be kept of all raw treatment chemicals used in plant operations.

Bases: The chemicals used in the different processes within the plant are required to provide safe and efficient operation of the various unit operations. All chemicals are added to these systems on an "as needed" basis.

2.0 ENVIRONMENTAL PROTECTION CONDITION	3.0 MONITORING REQUIREMENTS

Bases: Boric acid is used as chemical shim during plant operation in order to control reactivity within the primary cycle.

Hydrazine is used as a reducing agent to remove oxygen in the steam cycle system. At high temperatures, hydrazine decomposes to ammonia which in turn is used to control the pH in the steam cycle system. No other chemicals are introduced to the steam cycle system for treatment. The chemicals added to the pre-treatment system are ferric sulfate to coagulate the turbidity in the water, lime to presoften the water, polyelectrolyte to aid in the development of the floc, hypochlorite solution to kill bacteria and sterilize the water and sodium sulfite to reduce any free chlorine before entering the demineralizers. 11

Caustic soda and sulphuric acid are used in the demineralizer system regeneration process while salt is used to regenerate the water softener.

Amendment No. 9
Change No. 11
August 1, 1975

4.0 ENVIROMENTAL SURVEILLANCE AND SPECIAL STUDIES

4.1 Biological

4.1.1 Aquatic

a. General Ecological Survey to evaluate the contribution of the plant discharges on the biotic stresses in the lake and including possible long term effects.

Objective: The specific aims of the general survey are as follows:

1. Identify certain physical characteristics such as water temperature, local lake currents, and bottom contours in the immediate plant influence.
2. Investigate benthic macroinvertebrates, zooplankton, phytoplankton, and periphyton populations and their distribution within the area of the thermal plume, intake, and in nearby control areas.
3. Characterize the distribution of fish at different seasons in the vicinity of the intake and discharge.
4. Determine whether the warm water discharge or intake of cooling water is having an adverse impact on the life history of fish in the vicinity of the plant.
5. Determine changes in the bacteriological and chemical makeup of the Lake Michigan waters in the vicinity of the plant.
6. Determine a numerical predictive model for the thermal plume and measure the shape and extent of the thermal plume during plant operation.

Specification:

1. A general ecological survey shall be undertaken for two years after the plant becomes operational.
   a. Data collected during the two years of the program shall be reviewed and evaluated by the licensee and the NRC to determine whether the program should be modified or discontinued.
   b. The program may be modified as necessary to accommodate changes occuring during the survey. These changes shall be reported in accordance with Plant Reporting Requirements.
   c. A summary of the progress and results of these studies shall be reported in accordance with Plant Reporting Requirements. 11
   d. The frequency of the field sampling program shall be in accordance with Table ES 4.1.1-1.
   e. Sampling locations and the parameters sampled shall be established in accordance with Figure ES 4.1.1-1.
2. Water Column Profile Locations
   a. Seventeen profile sampling locations shall be established in accordance with Figure ES 4.1.1-1. Five

Copper
Fluoride
Hardness, Total
Hydrazine
Iron
Iron, Total
Lead
Solids, Total Dissolved
Solids, Total Suspended
Sulfate
Temperature Profiles
Turbidity
Zinc

5. Lake Currents - Lake currents in the vicinity of the thermal plume shall be measured continuously by current meters. | 1
6. Phytoplankton
   a. Duplicate water samples for phytoplankton analysis shall be collected at seven stations at a depth of one meter below the lake surface.
   b. A species checklist and enumeration shall be compiled for each sample.
7. Zooplankton
   a. Zooplankton samples shall be collected from fifteen locations.
   b. Four replicate samples shall be taken at each location.
   c. Organisms shall be identified to the lowest positive taxonomic level and enumerated.
   d. Populations shall be analyzed to determine the difference between locations.
8. Periphyton
   a. Periphyton samples shall be collected from naturally occurring rock substrates at each of the three sampling locations.
   b. The color, species composition, and abundance of the attached algae and the type of substrate upon which it grows shall be noted.
   c. A species checklist, including the relative abundance of each species, shall be prepared for each sample to determine differences and similarities among locations.
9. Benthos
   a. Benthos samples shall be taken at nine locations.
   b. Organisms shall be identified to the lowest positive taxonomic level and enumerated in abundance per square meter.
10. Fish
   a. Gill nets shall be used to sample fish populations at three locations.
   b. Minnow seining shall be conducted at three locations.
   c. Fish eggs and larvae shall be sampled and identified at six locations during the spawning season for local species.
   d. All fish, except alewife and smelt, shall be identified and measured, those fish larger than 10 inches shall also be weighed and checked for parasite markings and disease. A subsample of 20 individuals of each species (alewife and smelt) will be taken to determine the size range of the catch and to provide ample data for calculation of mean lengths, weights and condition. | 1

e. Scale samples shall be taken for age and growth analysis for selected species.
f. Stomach samples shall be taken from selected species for food habit determination.

Bases: The general ecological survey of the aquatic environment in the vicinity of the Kewaunee Plant will provide the necessary information to compare three years of pre-operational study with data taken during the two years of operational study.

Bottom contours of the discharge area will help to analyze the effect that the circulating water velocity has upon the bottom.

The primary source of data on currents has been with continuous measurements with current meters. Drogues are used to obtain current direction data for comparison with current meter data and when specialized studies such as obtaining time-temperature data or defining eddy circulation patterns are required. 11

By using a benthic pump and a diver to collect benthos samples, a very reliable sample is obtainable which will allow better determination of the thermal influence of the plume upon benthic organisms.

The setting of gill nets with one 300 foot panel of 2½ inch stretched mesh, one 300 foot panel of 3½ inch stretched mesh, one 300 foot panel of 5½ inch stretched mesh and one 50 foot panel of 1½ inch stretched mesh for a twelve hour period will allow a representative sampling of fish, which will aid in the determination of fish density before and after plant operation.

Water Column Profile data will be examined to determine the degree of similarity in the water masses which make up the study area. Seasonal differences will be noted.

Water quality data will be determined and compared to state and federal standards and data collected from other areas of the lake.

Bacteriological data, along with BOD results, will aid to determine the presence of domestic and/or agriculture wastes near the site.

Phytoplankton data will assist in determining the water quality and nutrient levels to support algae growth near the site. Abundance of specific species will present a basis for comparing the study area to other regions where similar surveys are being conducted.

Periphyton data will be used to determine the effect of the discharge on growth and species composition of the awfuchs community.

4.1.1 Aquatic

b. Entrainment and Impingement

Objective: To determine the effects of entrainment of phytoplankton and zooplankton and the impingement of fish on the traveling screens.

Specification: Entrainment and impingement studies shall continue for two years after the plant becomes operational. A summary of the progress and results of these studies shall be reported in accordance with Plant Reporting Requirements. Data collected during the two years of the program shall be evaluated by the licensee and the NRC to determine whether the program should be modified or discontinued. 11

1. Fish Impingement
   The number, size and weight of all individual fish collected in a 24 hour period in the circulating cooling water trash basket shall be identified and quantified by plant personnel a minimum of twice per week during circulating water pump operation. An inspection of the trash basket should be made at least once per shift. If the number of smelt and alewives captured in the trash basket exceeds 50, the average size and weight and an estimate of the total number shall be determined from a subsample of approximately 10% of the impinged species. 11

2. Phytoplankton Entrainment
   a. Phytoplankton analysis shall be conducted on samples from six locations; at the intake in the forebay, in the discharge, at two locations in the plume, and at one sampling location in a control area outside of the plume influence.
   b. Duplicate samples shall be taken and the concentration of chlorophyll a and photosynthetic rate as determined by ^{14}C uptake shall be determined at 7, 24, 48 and 72 hours after collection. Species composition and density shall be determined for selected sampling locations.

3. Zooplankton Entrainment
   a. Duplicate samples shall be collected from the same stations as the phytoplankton samples.

5.0 ADMINISTRATIVE CONTROLS

5.1 Organization, Review and Audit

a. Organization

1. The Plant Superintendent has on-site responsibility for the operation of the facility and to assure that the limits as noted in the environmental specifications as defined herein are not exceeded.
2. The Plant Superintendent shall report to the Superintendent - Nuclear Power. In the absence of the Plant Superintendent, an Assistant Superintendent will assume his responsibilities.
3. The Staff Environmental Engineer, reporting to the Senior Vice President - Power Supply and Engineering, has primary responsibility for the initiation and execution, by technically competent personnel, of the environmental surveillance and special studies which are required by the environmental technical specifications. In the absence of the Staff Environmental Engineer, the Environmental Specialist will assume his responsibilities. 11
4. The Staff Environmental Engineer has primary responsibility for directing the testing work as assigned to independent consultants who have the task of sampling and performing the studies.

b. Review and Audit

1. The Plant Operations Review Committee (PORC), as described in the Plant Technical Specifications, Appendix A, Section 6, shall have the responsibility of performing the review and audit of those sections of the program which refer to the allowable limits for temperature and chemical discharges.

2. The Nuclear Safety Review and Audit Committee, as described in the Plant Technical Specifications, Appendix A, Section 6.0, supplemented as necessary by technically qualified personnel, shall have the responsibility of performing the review and audit of the environmental monitoring, surveillance, and special studies programs as they pertain to plant operations. 11

5.2 Actions to be Taken in the Event of Violation of the Environmental Technical Specifications

a. Any occurrence in violation of any portion of the environmental technical specifications shall be reported and promptly reviewed by the Plant Operations Review Committee. The occurrence shall be reported to the Superintendent - Nuclear Power, Superintendent - Kewaunee Plant and the Staff Environmental Engineer. | 11

b. The Plant Operations Review Committee (PORC) shall prepare a separate report for each such occurrence. This report shall include an evaluation of the cause of the occurrence and also recommendations for appropriate action to prevent or reduce the probability of a re-occurrence.

c. The Staff Environmental Engineer responsible for the program shall prepare a report of his findings. | 11

d. Copies of all such reports shall be submitted to the Superintendent - Nuclear Power, and to the Superintendent - Steam Plants for review and approval of any recommendations.

e. The Plant Superintendent or his designee shall notify the NRC within 24 hours; as specified in Specification 6.6, Appendix A, of the circumstances of any occurrences. A written report shall follow in accordance with the requirements of Specification 6.6 of Appendix A. | 11

f. All such occurrences shall be reported in accordance with Plant Reporting Requirements. | 11

5.3 Operating Procedures

a. Detailed written procedures including check-off lists and instructions, where applicable, shall be prepared, approved, and adhered to for the following:

1. Control of additions of chemicals for both the primary and secondary systems.
2. Control of release of chemicals in the circulating water discharge.
3. Control the flow of discharge waters to remain within the allowable rate of change and discharge temperatures.
4. Sampling methods, frequencies and locations.
5. Preventive or corrective procedures which could have an effect on the environmental aspects of the plant.
6. Calibration procedures for various instruments used in measuring and analyzing the samples which are required by these specifications.

b. All procedures, as they pertain to these specifications, shall be reviewed by the PORC and approved by the Plant Superintendent prior to implementation. Temporary changes to procedures which do not change the intent of the original procedure may be made with the concurrence of two persons having responsibility for the activity. The Staff Environmental Engineer shall be notified of such changes. Such changes shall be documented and subsequently reviewed by the PORC and approved by the Plant Superintendent. | 11

5.4 Plant Reporting Requirements

In addition to reports required by applicable regulations, Wisconsin Public Service Corporation shall provide the following information:

a. Annual Operating Report

An Annual Operating Report covering the previous twelve month's operations and surveillance monitoring shall be submitted within 60 days after January 1 of each year.

b. Reporting Requirement - 24 Hours

Any occurrence as noted in Section 5.2a shall be reported to the Nuclear Regulatory Commission within 24 hours by telephone and telegraph to the Director, Region III, Office of Inspection & Enforcement.

11

c. Reporting Requirement - 10 Days

A written report shall be submitted within 10 days to the Director, Office of Nuclear Reactor Regulation, USNRC, Washington, D.C. 20555, with a copy to the Director, Region III, Office of Inspection & Enforcement, of any event previously reported under the provisions of 5.4.b above. The report shall describe the event, determine the cause of the violation, analyze and evaluate the implications, and prepare an outline of the corrective measures taken or planned to prevent re-occurrence. In addition, the report shall relate any violation of these specifications to any significant environmental impact.

d. Changes to the Plant or Procedures

A written report should be forwarded to the Director, Office of Nuclear Reactor Regulation, USNRC, Washington, D.C. 20555 with a copy to the Director, Region III, Office of Inspection & Enforcement, in the event of:

1. Proposed changes to the plant that would result in more severe environmental impact than evaluated in the Environmental Report and the Environmental Statement should be submitted for NRC approval. These changes do not preclude making changes on short notice that are significant in terms of decreasing the adverse environmental impact.

2. Changes to environmental monitoring equipment or procedures.

3. Changes or additions to permits and certificates requested by Federal, State, Local and Regional authorities for the protection of the environment. When submittals of the changes are made to the concerned agency, the copy shall be submitted to the NRC as noted above. The report shall include an evaluation of the impact of the change. | 11

4. Request for approval of changes in the environmental technical specifications. The request shall include an evaluation of the impact of the change.

e. General Reporting Requirements

If harmful effects or evidence of irreversible damage are detected by the monitoring programs, the licensee will provide to the NRC an analysis of the problem and plan of action to be taken to eliminate or significantly reduce the detrimental effects or damage. | 11

5.5 Record Retention

a. Record Retention - 5 Years

Records and/or logs relative to the following items shall be kept in a manner convenient for review and retained for five years. 11

1. Records of normal plant operation, including power levels and periods of operation at each power level.
2. Records of principal maintenance activities, including repair, substitution or replacement of principal items of equipment pertaining to environmental impact.
3. Records of occurrences in violation of environmental technical specifications.
4. Records of periodic checks, inspections and calibrations performed to verify that environmental surveillance requirements are being met.
5. Records of any special operational modes (tests or experiments).
6. Records of changes made to procedures, equipment, permits and certificates.
7. Records of changes to operating procedures. 11

b. Record Retention - Life of Plant

Records relative to the following items shall be kept in a manner convenient for review and retained for the life of the plant.

1. 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.
2. Records of off-site environmental monitoring surveys.
3. Plant Operations Review Committee meeting minutes.
4. Nuclear Safety Review and Audit Committee meeting minutes. 11