



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 7, 2001

Mr. Mark Reddemann
Site Vice President
Kewaunee and Point Beach Nuclear Power Plants
Nuclear Management Company, LLC
6610 Nuclear Road
Two Rivers, WI 54241

SUBJECT: KEWAUNEE NUCLEAR POWER PLANT - CORRECTION TO AMENDMENT NO.
151 ISSUED ON FEBRUARY 12, 2001 (TAC NO. MB0571)

Dear Mr. Reddemann:

On February 12, 2001, the Nuclear Regulatory Commission (NRC) issued Amendment No. 151 to Facility Operating License No. DPR-43 for the Kewaunee Nuclear Power Plant (KNPP) in response to your request dated November 10, 2000. This amendment revised the KNPP Technical Specifications (TSs) to make administrative changes, to change titles, and to change the calibration frequency for the turbine first stage pressure.

Typographical errors were inadvertently made on the revised TSs pages. Specifically, the font (arial) and the character size (11) of the revised TSs pages do not match the font (letter gothic) and the character size (12) you requested in your submittal. In addition, the footer containing "Amendment 151" on the revised TSs pages is not far enough in the bottom right hand corner of the pages. The revised TSs pages have been corrected to remove these typographical errors, and the revised TSs pages are enclosed.

We regret any inconvenience this may have caused. If you have any questions regarding this matter, please call me at (301) 415-1446.

Sincerely,

John G. Lamb, Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-305

Enclosures: As stated

cc w/encl: See next page

March 7, 2001

Mr. Mark Reddemann
Site Vice President
Kewaunee and Point Beach Nuclear Power Plants
Nuclear Management Company, LLC
6610 Nuclear Road
Two Rivers, WI 54241

SUBJECT: KEWAUNEE NUCLEAR POWER PLANT - CORRECTION TO AMENDMENT NO.
151 ISSUED ON FEBRUARY 12, 2001 (TAC NO. MB0571)

Dear Mr. Reddemann:

On February 12, 2001, the Nuclear Regulatory Commission (NRC) issued Amendment No. 151 to Facility Operating License No. DPR-43 for the Kewaunee Nuclear Power Plant (KNPP) in response to your request dated November 10, 2000. This amendment revised the KNPP Technical Specifications (TSs) to make administrative changes, to change titles, and to change the calibration frequency for the turbine first stage pressure.

Typographical errors were inadvertently made on the revised TSs pages. Specifically, the font (arial) and the character size (11) of the revised TSs pages do not match the font (letter gothic) and the character size (12) you requested in your submittal. In addition, the footer containing "Amendment 151" on the revised TSs pages is not far enough in the bottom right hand corner of the pages. The revised TSs pages have been corrected to remove these typographical errors, and the revised TSs pages are enclosed.

We regret any inconvenience this may have caused. If you have any questions regarding this matter, please call me at (301) 415-1446.

Sincerely,

/RA/

John G. Lamb, Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-305

Enclosures: As stated

cc w/encl: See next page

DISTRIBUTION

PUBLIC CCraig THarris OGC RLanksbury, RIII
PDIII-1 Reading JLamb ACRS

OFFICE	PDIII-1/PM	PDIII-1/LA	OGC	PDIII-1/SC
NAME	JLamb <i>[Signature]</i>	THarris <i>[Signature]</i>	CMarco	CCraig <i>[Signature]</i>
DATE	2/27/01	02/27/01	03-02-01	3/7/01

DOCUMENT NAME: G:\PDIII-1\KEWAUNEE\LTRmb0571COR.wpd

OFFICIAL RECORD COPY

Kewaunee Nuclear Power Plant

cc:

Foley & Lardner
ATTN: Bradley D. Jackson
One South Pinckney Street
P.O. Box 1497
Madison, WI 53701-1497

Nuclear Asset Manager
Wisconsin Public Service Corporation
600 N. Adams Street
Green Bay, WI 54307-9002

Chairman
Town of Carlton
Route 1
Kewaunee, WI 54216

Plant Manager
Kewaunee Nuclear Power Plant
Nuclear Management Company, LLC
North 490, Highway 42
Kewaunee, WI 54216-9511

Gerald Novickus, Chairman
Kewaunee County Board
Kewaunee County Courthouse
Kewaunee, WI 54216

Attorney General
114 East, State Capitol
Madison, WI 53702

U.S. Nuclear Regulatory Commission
Resident Inspectors Office
Route #1, Box 999
Kewaunee, WI 54216

Regional Administrator - Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4531

James D. Looock, Chief Engineer
Public Service Commission
of Wisconsin
610 N. Whitney Way
Madison, WI 53707-7854

Michael D. Wadley
Chief Nuclear Officer
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

TABLE OF CONTENTS
TECHNICAL SPECIFICATIONS
APPENDIX A

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.0	Definitions	1.0-1
1.0.a	Quadrant-to-Average Power Tilt Ratio	1.0-1
1.0.b	Safety limits	1.0-1
1.0.c	Limiting Safety System Settings	1.0-1
1.0.d	Limiting Conditions for Operation	1.0-1
1.0.e	Operable - Operability	1.0-2
1.0.f	Operating	1.0-2
1.0.g	Containment System Integrity	1.0-2
1.0.h	Protective Instrumentation Logic	1.0-3
1.0.i	Instrumentation Surveillance	1.0-3
1.0.j	Modes	1.0-4
1.0.k	Reactor Critical	1.0-4
1.0.l	Refueling Operation	1.0-4
1.0.m	Rated Power	1.0-5
1.0.n	Reportable Event	1.0-5
1.0.o	Radiological Effluents	1.0-5
1.0.p	Dose Equivalent I-131	1.0-6
2.0	Safety Limits and Limiting Safety System Settings	2.1-1
2.1	Safety Limits, Reactor Core	2.1-1
2.2	Safety Limit, Reactor Coolant System Pressure	2.2-1
2.3	Limiting Safety System Settings, Protective Instrumentation	2.3-1
2.3.a	Reactor Trip Settings	2.3-1
2.3.a.1	Nuclear Flux	2.3-1
2.3.a.2	Pressurizer	2.3-1
2.3.a.3	Reactor Coolant Temperature	2.3-2
2.3.a.4	Reactor Coolant Flow	2.3-3
2.3.a.5	Steam Generators	2.3-3
2.3.a.6	Reactor Trip Interlocks	2.3-3
2.3.a.7	Other Trips	2.3-4
3.0	Limiting Conditions for Operation	3.0-1
3.1	Reactor Coolant System	3.1-1
3.1.a	Operational Components	3.1-1
3.1.a.1	Reactor Coolant Pumps	3.1-1
3.1.a.2	Decay Heat Removal Capability	3.1-1
3.1.a.3	Pressurizer Safety Valves	3.1-2
3.1.a.4	Pressure Isolation Valves	3.1-3
3.1.a.5	Pressurizer PORV and PORV Block Valves	3.1-3
3.1.a.6	Pressurizer Heaters	3.1-4
3.1.a.7	Reactor Coolant Vent System	3.1-5
3.1.b	Heatup & Cooldown Limit Curves for Normal Operation	3.1-6
3.1.c	Maximum Coolant Activity	3.1-8
3.1.d	Leakage of Reactor Coolant	3.1-9
3.1.e	Maximum Reactor Coolant Oxygen, Chloride and Fluoride Concentration	3.1-10
3.1.f	Minimum Conditions for Criticality	3.1-11
3.2	Chemical and Volume Control System	3.2-1

<u>Section</u>	<u>Title</u>	<u>Page</u>
3.3	Engineered Safety Features and Auxiliary Systems	3.3-1
3.3.a	Accumulators	3.3-1
3.3.b	Emergency Core Cooling System	3.3-2
3.3.c	Containment Cooling Systems	3.3-4
3.3.d	Component Cooling System	3.3-6
3.3.e	Service Water System	3.3-7
3.4	Steam and Power Conversion System	3.4-1
3.4.a	Main Steam Safety Valves	3.4-1
3.4.b	Auxiliary Feedwater System	3.4-2
3.4.c	Condensate Storage Tank	3.4-4
3.4.d	Secondary Activity Limits	3.4-5
3.5	Instrumentation System	3.5-1
3.6	Containment System	3.6-1
3.7	Auxiliary Electrical Systems	3.7-1
3.8	Refueling Operations	3.8-1
3.9	Deleted	
3.10	Control Rod and Power Distribution Limits	3.10-1
3.10.a	Shutdown Reactivity	3.10-1
3.10.b	Power Distribution Limits	3.10-2
3.10.c	Quadrant Power Tilt Limits	3.10-6
3.10.d	Rod Insertion Limits	3.10-6
3.10.e	Rod Misalignment Limitations	3.10-7
3.10.f	Inoperable Rod Position Indicator Channels	3.10-8
3.10.g	Inoperable Rod Limitations	3.10-8
3.10.h	Rod Drop Time	3.10-9
3.10.i	Rod Position Deviation Monitor	3.10-9
3.10.j	Quadrant Power Tilt Monitor	3.10-9
3.10.k	Core Average Temperature	3.10-9
3.10.l	Reactor Coolant System Pressure	3.10-9
3.10.m	Reactor Coolant Flow	3.10-10
3.10.n	DNBR Parameters	3.10-10
3.11	Core Surveillance Instrumentation	3.11-1
3.12	Control Room Post-Accident Recirculation System	3.12-1
3.14	Shock Suppressors (Snubbers)	3.14-1
4.0	Surveillance Requirements	4.0-1
4.1	Operational Safety Review	4.1-1
4.2	ASME Code Class In-service Inspection and Testing	4.2-1
4.2.a	ASME Code Class 1, 2, 3, and MC Components and Supports	4.2-1
4.2.b	Steam Generator Tubes	4.2-2
4.2.b.1	Steam Generator Sample Selection and Inspection	4.2-4
4.2.b.2	Steam Generator Tube Sample Selection and Inspection	4.2-4
4.2.b.3	Inspection Frequencies	4.2-6
4.2.b.4	Plugging Limit Criteria	4.2-7
4.2.b.5	Tube Support Plate Plugging Limit	4.2-9
4.2.b.6	F* and EF* Tubesheet Crevice Region Plugging Criteria	4.2-11
4.2.b.7	Reports	4.2-11
4.3	Deleted	

<u>Section</u>	<u>Title</u>	<u>Page</u>
4.4	Containment Tests	4.4-1
4.4.a	Integrated Leak Rate Tests (Type A)	4.4-1
4.4.b	Local Leak Rate Tests (Type B and C)	4.4-1
4.4.c	Shield Building Ventilation System	4.4-1
4.4.d	Auxiliary Building Special Ventilation System	4.4-3
4.4.e	Containment Vacuum Breaker System	4.4-3
4.5	Emergency Core Cooling System and Containment Air Cooling System Tests	4.5-1
4.5.a	System Tests	4.5-1
4.5.a.1	Safety Injection System	4.5-1
4.5.a.2	Containment Vessel Internal Spray System	4.5-1
4.5.a.3	Containment Fan Coil Units	4.5-2
4.5.b	Component Tests	4.5-2
4.5.b.1	Pumps	4.5-2
4.5.b.2	Valves	4.5-2
4.6	Periodic Testing of Emergency Power System	4.6-1
4.6.a	Diesel Generators	4.6-1
4.6.b	Station Batteries	4.6-2
4.7	Main Steam Isolation Valves	4.7-1
4.8	Auxiliary Feedwater System	4.8-1
4.9	Reactivity Anomalies	4.9-1
4.10	Deleted	
4.11	Deleted	
4.12	Spent Fuel Pool Sweep System	4.12-1
4.13	Radioactive Materials Sources	4.13-1
4.14	Testing and Surveillance of Shock Suppressors (Snubbers)	4.14-1
4.15	Deleted	
4.16	Reactor Coolant Vent System Tests	4.16-1
4.17	Control Room Postaccident Recirculation System	4.17-1
5.0	Design Features	5.1-1
5.1	Site	5.1-1
5.2	Containment	5.2-1
5.2.a	Containment System	5.2-1
5.2.b	Reactor Containment Vessel	5.2-2
5.2.c	Shield Building	5.2-2
5.2.d	Shield Building Ventilation System	5.2-2
5.2.e	Auxiliary Building Special Ventilation Zone and Special Ventilation System	5.2-3
5.3	Reactor Core	5.3-1
5.3.a	Fuel Assemblies	5.3-1
5.3.b	Control Rod Assemblies	5.3-1
5.4	Fuel Storage	5.4-1
5.4.a	Criticality	5.4-1
5.4.b	Capacity	5.4-1
5.4.c	Canal Rack Storage	5.4-2
6.0	Administrative Controls	6.1-1
6.1	Responsibility	6.1-1
6.2	Organization	6.2-1
6.2.a	Off-Site Staff	6.2-1
6.2.b	Facility Staff	6.2-1
6.2.c	Organizational Changes	6.2-2
6.3	Plant Staff Qualifications	6.3-1

<u>Section</u>	<u>Title</u>	<u>Page</u>
6.4	Training	6.4-1
6.5	Deleted	6.5-1 - 6.5-6
6.6	Deleted	6.6-1
6.7	Safety Limit Violation	6.7-1
6.8	Procedures	6.8-1
6.9	Reporting Requirements	6.9-1
6.9.a	Routine Reports	6.9-1
6.9.a.1	Startup Report	6.9-1
6.9.a.2	Annual Reporting Requirements	6.9-1
6.9.a.3	Monthly Operating Report	6.9-3
6.9.b	Unique Reporting Requirements	6.9-3
6.9.b.1	Annual Radiological Environmental Monitoring Report	6.9-3
6.9.b.2	Radioactive Effluent Release Report	6.9-3
6.9.b.3	Special Reports	6.9-3
6.10	Record Retention	6.10-1
6.11	Radiation Protection Program	6.11-1
6.12	System Integrity	6.12-1
6.13	High Radiation Area	6.13-1
6.14	Post-Accident Sampling and Monitoring	6.14-1
6.15	Secondary Water Chemistry	6.15-1
6.16	Radiological Effluents	6.16-1
6.17	Process Control Program (PCP)	6.17-1
6.18	Offsite Dose Calculation Manual (ODCM)	6.18-1
6.19	Major Changes to Radioactive Liquid, Gaseous and Solid Waste Treatment Systems	6.19-1
6.20	Containment Leakage Rate Testing Program	6.20-1

7/8.0 Deleted

3. CHANNEL CALIBRATION

CHANNEL CALIBRATION consists of the adjustment of channel output as necessary, such that it responds, with acceptable range and accuracy, to known values of the parameter which the channel monitors. Calibration shall encompass the entire channel, including alarm and/or trip, and shall be deemed to include the CHANNEL FUNCTIONAL TEST.

4. SOURCE CHECK

A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a source of increased radioactivity.

5. FREQUENCY NOTATION

The FREQUENCY NOTATION specified for the performance of surveillance requirements shall correspond to the intervals in Table TS 1.0-1.

j. MODES

MODE	REACTIVITY Δk/k	COOLANT TEMP T _{avg} °F	FISSION POWER %
REFUELING	≤ -5%	≤ 140	~0
COLD SHUTDOWN	≤ -1%	≤ 200	~0
INTERMEDIATE SHUTDOWN	(1)	> 200 < 540	~0
HOT SHUTDOWN	(1)	≥ 540	~0
HOT STANDBY	< 0.25%	~T _{oper}	< 2
OPERATING	< 0.25%	~T _{oper}	≥ 2
LOW POWER PHYSICS TESTING	(To be specified by specific tests)		
(1) Refer to Figure TS 3.10-1			

k. REACTOR CRITICAL

The reactor is said to be critical when the neutron chain reaction is self-sustaining.

1. REFUELING OPERATION

REFUELING OPERATION is any operation involving movement of reactor vessel internal components (those that could affect the reactivity of the core) within the containment when the vessel head is unbolted or removed.

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
1. Nuclear Power Range	Each shift(a) Effective Full Power Month(c)	Daily(a) Effective Full Power Quarter(c)	Monthly(b) Quarterly(d)	(a) Heat balance (b) Signal to ΔT ; bistable action (permissive, rod stop, trips) (c) Upper and lower chambers for axial off-set using incore detectors. The check and calibration for axial offset shall also be performed prior to > 75% power following any core alteration. (d) Permissives P8 and P10 and the 25% reactor trip are tested quarterly.
2. Nuclear Intermediate Range	Each shift(a,c)	Not applicable	Prior to each startup if not done previous week(b)	(a) Once/shift when in service (b) Log level; bistable action (permissive, rod stop, trips) (c) Channel check required in all plant modes
3. Nuclear Source Range	Each shift(a,c)	Not applicable	Prior to each startup if not done previous week(b)	(a) Once/shift when in service (b) Bistable action (alarm, trips) (c) Channel check required in all plant modes
4. Reactor Coolant Temperature	Each shift (c)	Each refueling cycle	Monthly(a) Monthly(b)	(a) Overtemperature ΔT (b) Overpower ΔT (c) Channel check not required below HOT SHUTDOWN
5. Reactor Coolant Flow	Each shift	Each refueling cycle	Monthly	

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
6. Pressurizer Water Level	Each shift	Each refueling cycle	Monthly	
7. Pressurizer Pressure	Each shift	Each refueling cycle	Monthly	
8. a. 4-KV Voltage and Frequency	Not applicable	Each refueling cycle	Monthly	Reactor protection circuits only
b. 4-KV Voltage (Loss of Voltage)	Not applicable	Each refueling cycle	Monthly	Safeguards buses only
c. 4-KV Voltage (Degraded Grid)	Not applicable	Each refueling cycle	Monthly	Safeguards buses only
9. Analog Rod Position	Each shift(a,b)	Each refueling cycle	Each refueling cycle	(a) With step counters (b) Following rod motion in excess of 24 steps when computer is out of service
10. Rod Position Bank Counters	Each shift(a,b)	Not applicable	Each refueling cycle	(a) With analog rod position (b) Following rod motion in excess of 24 steps when computer is out of service

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
11. a. Steam Generator Low Level	Each shift	Each refueling cycle	Monthly	
b. Steam Generator High Level	Each shift	Each refueling cycle	Monthly	
12. Steam Generator Flow Mismatch	Each shift	Each refueling cycle	Monthly	
13. Deleted				
14. Residual Heat Removal Pump Flow	Each shift (when in operation)	Each refueling cycle	Not applicable	
15. Deleted				
16. Refueling Water Storage Tank Level	Weekly	Annually	Not applicable	
17. Deleted				

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
18. a. Containment Pressure (SIS signal)	Each shift	Each refueling cycle	Monthly(a)	(a) Isolation Valve Signal
b. Containment Pressure (Steamline Isolation)	Each shift(a)	Each refueling cycle(a)	Monthly(a)	(a) Narrow range containment pressure (-3.0, +3.0 psig excluded)
c. Containment Pressure (Containment Spray Act)	Each shift	Each refueling cycle	Monthly	
d. Annulus Pressure (Vacuum Breaker)	Not applicable	Each refueling cycle	Each refueling cycle	
19. Radiation Monitoring System	Daily (a,b)	Each refueling cycle (a)	Quarterly (a)	(a) Includes only channels R11 thru R15, R19, R21, and R23 (b) Channel check required in all plant modes
20. Deleted				
21. Containment Sump Level	Not applicable	Not applicable	Each refueling cycle	
22. Accumulator Level and Pressure	Each shift	Each refueling cycle	Not applicable	
23. Steam Generator Pressure	Each shift	Each refueling cycle	Monthly	

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
24. Turbine First Stage Pressure	Each shift	Each refueling cycle	Monthly	
25. Portable Radiation Survey Instruments	Monthly (a)	Annually	Quarterly	(a) Channel check required in all plant modes
26. Protective System Logic Channel Testing	Not applicable	Not applicable	Monthly	Includes auto load sequencer
27. Deleted				
28. Deleted				
29. Seismic Monitoring System	Each refueling cycle	Each refueling cycle	Not applicable	
30. Fore Bay Water Level	Not applicable	Each refueling cycle	Each refueling cycle	
31. AFW Flow Rate	(a)	Each refueling cycle	Not applicable	(a) Flow rate indication will be checked at each unit startup and shutdown
32. PORV Position Indication	Monthly	Each refueling cycle	Not applicable	
a. Back-up (Temperature)	Monthly	Each refueling cycle	Not applicable	
33. PORV Block Valve Position Indicator	Monthly	Each refueling cycle	Not applicable	

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
34. Safety Valve Position Indicator (Acoustic)	Monthly	Each refueling cycle	Not applicable	
a. Back-up (Temperature)	Monthly	Each refueling cycle	Not applicable	
35. FW Pump Trip (AFW Initiation)	Not applicable	Not applicable	Each refueling cycle	
36. Reactor Coolant System Subcooling Monitor	Monthly	Each refueling cycle	Each refueling cycle	
37. Containment Pressure (Wide Range)	Daily	Each refueling cycle	Not applicable	
38. Containment Hydrogen Monitors	Daily	Each refueling cycle	Monthly	
39. Containment Water Level (Wide Range)	Not applicable	Not applicable	Each refueling cycle	
40. Reactor Vessel Level Indication	Monthly	Each refueling cycle	Not applicable	
41. Core Exit Thermocouples	Monthly	Each refueling cycle	Not applicable	
42. Steam Generator Level (Wide Range)	Monthly	Each refueling cycle	Not applicable	

6.4 TRAINING

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

6. Records of transient or operational cycles for these facility components.
7. Records of training and qualification for current members of the plant staff.
8. Records of in-service inspections performed pursuant to these Technical Specifications.
9. Records of meetings of the JOSRC and PORC.
10. Records for Environmental Qualification.
11. Records of reviews performed for changes made to the ODCM and the PCP.