

50-305

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TO: Mr Schwencer

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PROP

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DESCRIPTION

Ltr notarized 12-10-76.....trans the following:

PLANT NAME: Kewaunee

ENCLOSURE

Amdt #40 to OL/Change to Tech Specs: Consists of Change #29 to the FSAR.....consisting of revisions with regard to incorporation of ECCS info.....(40 cys encl rec'd)

Rev. per addtl info to the FSAR & Tech Specs by B/MH dtd 12-29-76

ACKNOWLEDGED

DO NOT REMOVE

SAFETY

FOR ACTION/INFORMATION

ENVIRO

12-18-76

ehf

ASSIGNED AD:

BRANCH CHIEF:

PROJECT MANAGER:

LIC. ASST. :

*Schwencer (5)
Neighbors
Sheppard*

ASSIGNED AD:

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P. COLLINS	NOVAK	SHAO	HULMAN
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☒ LPDR: Kewaunee, WI	NAT. LAB:	BROOKHAVEN NAT. LAB.
☒ TIC:	REG V. IE	ULRIKSON (CRNL)
☒ NSIC:	LA PDR	
☒ ASLB:	CONSULTANTS:	
☒ ACRS 16 CYS HOLDING/SENT	As CAT B 12-14-76	

12540

WISCONSIN PUBLIC SERVICE CORPORATION

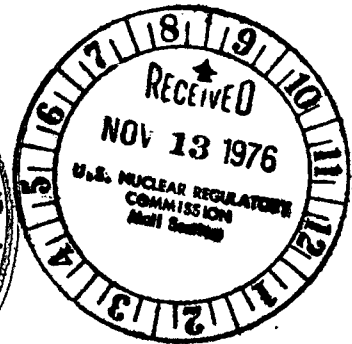
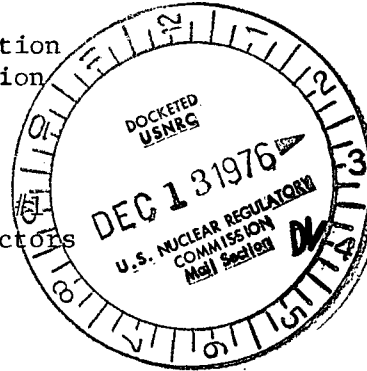


P.O. Box 1200, Green Bay, Wisconsin 54305

December 10, 1976

Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

ATTN: Mr. A. Schwencer, Chief
Operating Reactors Branch
Division of Operating Reactors



Gentlemen:

REF: Docket 50-305
Operating License DPR-43
FSAR Revision No. 29, Technical Specifications
Proposed Amendment 22, Change No. 24

On August 27, 1976, an "Order for Modification of License" was issued by the Nuclear Regulatory Commission for the Kewaunee Nuclear Power Plant. The order limited the total nuclear peaking factor, F_Q , to 2.11 and required the submittal of an analysis in accordance with 10CFR50.46 as soon as possible.

Attached is Amendment No. 40 to the Safety Analysis and Application for License, which is Change No. 29 to the Final Safety Analysis Report. This attachment includes the results of a reanalysis of the Kewaunee Plant in conformance to 10CFR50.46. As noted in the text of this attachment, the analysis assumes a reactor vessel upper head fluid temperature equal to the Reactor Coolant System hot leg temperature in accordance with the "Order of Modification of License" issued on August 27, 1976. The text of the attachment includes the results for the most limiting break size, a DECLG with $C_D = 0.4$, and references Westinghouse ECCS Two Loop Plant Sensitivity Studies, WCAP 8854, which presents the analysis results for a break spectrum of a representative two loop plant with a 14 x 14 fuel design. The worst case analysis indicated that a total peaking factor, F_Q of 2.25, corresponded to a peak clad temperature of 2172°F, thereby providing 28°F margin to the 10CFR50.46 acceptance criteria of 2200°F. The analyses were performed employing the October 1975 version of the Westinghouse ECCS Evaluation Model which has been previously reviewed by the staff. This version of the Westinghouse ECCS Evaluation Model results in an increase in the F_Q value to 2.25 which provides significant additional peaking factor margin for plant operation.

The increase in F_Q from the 2.11 value of the "Order for Modification of License" to the 2.25 value indicated by the most recent analysis is incorporated in the attached Proposed Amendment No. 22 to the Operating License and Technical Specifications. Prompt processing of this proposed amendment will be appreciated.

12540

The proposed amendment to the Technical Specifications includes:

1. The change in F_Q to 2.25
2. Revision to Figure TS 3.10-2 to agree with the latest ECCS analysis assumptions.
3. Revision to Figure TS 3.10-6 to provide additional clarification of target band and Specification 3.10.b.8.a.
4. A change to the accumulator volume requirements to conform to the recent ECCS analysis assumptions. (The 1250 ft^3 is a nominal value within the analysis with an assumed tolerance of $\pm 25 \text{ ft}^3$)

We have also been informed by Westinghouse that a 2000 ppm boron concentration will not necessarily result in a 10% shutdown margin during refueling operations for all potential core designs in a two loop reactor. According to Westinghouse, a 2100 ppm boron concentration is necessary to assure the required refueling shutdown margin. We, therefore, propose that Technical Specification 3.8.a.5 be revised to require a 2100 ppm boron concentration in the Reactor Coolant System which will assure the required 10% shutdown margin for fuel handling operations.

Very truly yours,

R. A. Solbo
for

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

EWJ:sna

Enc.

Subscribed and Sworn to
Before Me This 10th Day
of December 1976

Conrad C. Seider
Notary Public, State of Wisconsin

My Commission Expires
September 28, 1980

cc - Mr. J. G. Keppler, US NRC Region 3

INSTRUCTIONS FOR MAKING PAGE CHANGES

Regulatory Docket File

Amendment No. 40 material is enclosed for insertion into the FSAR, Volumes 1 and 4. The material is assembled sequentially for insertion into the binders of the aforementioned Volumes.

Docket # **50-305**
Control # **12540**
Date **12-10-76** of Document:
REGULATORY DOCKET FILE

The following listing of material furnished as Amendment 40 will serve as a check list for entering revised and new pages. Insert the revised or new pages listed in Column 1 below, discarding only the superseded pages listed in Column 2.

Amendment No. 40 changes are marked by the number 29 (indicating FSAR Revision 29) adjacent to a vertical line in the borders of the pages alongside the new material. Pages consisting of entirely new material are simply indicated by the amendment number and date at the bottom of the page.

File these instruction sheets and the cover letter in the front of Volume 1 as a record of change.

Volume 1 - Section

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Volume 4 - Section 14

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Reference Section

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