

ACCELERATED DOCUMENT DISTRIBUTION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9311160413 DOC.DATE: 93/11/04 NOTARIZED: NO DOCKET #
 FACIL: 50-305 Kewaunee Nuclear Power Plant, Wisconsin Public Service 05000305
 AUTH.NAME AUTHOR AFFILIATION
 SCHROCK, C.A. Wisconsin Public Service Corp.
 RECIPIENT NAME RECIPIENT AFFILIATION
 MARTIN, J.B. Region 3 (Post 820201)

SUBJECT: Amends 931103 ltr to request enforcement discretion for 168 h beyond current 72 h LCO, based on current status of repair activities associated w/RHR pump as discussed in 931104 telcon, in ref to NRC Insp Manual, Part 9900.

DISTRIBUTION CODE: IE01D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES:

	RECIPIENT		COPIES			RECIPIENT		COPIES	
	ID CODE/NAME		LTTR	ENCL		ID CODE/NAME		LTTR	ENCL
	PD3-3 PD		1	1		LAUFER, R		1	1
INTERNAL:	ACRS		2	2		AEOD/DEIB		1	1
	AEOD/DSP/ROAB		1	1		AEOD/DSP/TPAB		1	1
	AEOD/TTC		1	1		DEDRO		1	1
	NRR/DORS/OEAB		1	1		NRR/DRCH/HHFB		1	1
	NRR/DRIL/RPEB		1	1		NRR/DRSS/PEPB		1	1
	NRR/PMAS/ILPB1		1	1		NRR/PMAS/ILPB2		1	1
	NUDOCS-ABSTRACT		1	1		OE DIR		1	1
	OGC/HDS1		1	1		REG FILE 02		1	1
	RES/HFB		1	1		RGN3 FILE 01		1	1
EXTERNAL:	EG&G/BRYCE, J.H.		1	1		NRC PDR		1	1
	NSIC		1	1					

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK, ROOM P1-37 (EXT. 504-2065) TO ELIMINATE YOUR NAME FROM DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 24 ENCL 24

IA-4
dhp



WISCONSIN PUBLIC SERVICE CORPORATION

600 North Adams • P.O. Box 19002 • Green Bay, WI 54307-9002

November 4, 1993

10 CFR 2, Appendix C (VII.C)

Mr. J. B. Martin, Regional Administrator, Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Ladies/Gentlemen:

Docket 50-305
Operating License DPR-43
Kewaunee Nuclear Power Plant
Request for Enforcement Discretion
for Kewaunee Nuclear Power Plant

PRIORITY ROUTING

First	Second
BA	RC
CEA	EIC
DEP	SCG
DRS	OI
DRSS	DAD
DRMA	
FILE	

orig + 1

- Reference:
- 1) NRC Inspection Manual, Part 9900, Guidance on 10CFR 2, Appendix C, Enforcement Discretion dated August 6, 1993
 - 2) Letter from C. A. Schrock (WPSC) to J. B. Martin (NRC) dated November 3, 1993
 - 3) Teleconference between WPSC and NRC on November 4, 1993, 12:30 p.m. CST

Based on the current status of the repair activities associated with the A Residual Heat Removal (RHR) pump as discussed in a teleconference on November 4, 1993 (reference 3), Wisconsin Public Service Corporation (WPSC) is amending reference 2 to request Enforcement Discretion for 168 hours beyond the current 72 hour limiting condition for operation (LCO). This represents a total out-of-service time of 240 hours.

Although the current repair activities are proceeding satisfactorily, WPSC requests the additional 48 hours as a contingency to allow for unforeseen problems with the repair, such as rewelding, radiography, etc. Additionally, if the repair of the pump is not successful, the time-line associated with pump replacement allows little contingency time for any unforeseen problems. Therefore, 168 hours beyond the current 72 hour LCO is requested.

9311160413 9
PDR ADCK 05000305
G PDR

IE 01 11
NOV 08 1993

Mr. J. B. Martin
November 4, 1993
Page 2

The Level 1 PRA was modified to assume a 240 hour LCO using the same methodology described in part B of question 3 of the Request for Enforcement Discretion. The instantaneous core damage frequency for the 10 day period is $1.24E-5$. Operation of the KNPP with one RHR pump out of service for 240 hours instead of the 72 hours allowed by the KNPP TS increases the overall annual plant core damage frequency by 9.5%. With this increase the total core damage frequency remains below the $1E-4$ /year industry estimate of an upper bound for an acceptable plant core damage frequency. The results of the Level 2 and shutdown PRAs do not greatly change from those provided for a 168 hour LCO; therefore, the conclusions associated with those two analyses do not change. WPSC believes that this is an acceptable risk level for the one time, limited duration period associated with the repair of the A RHR pump. Furthermore, all of the conclusions WPSC made in the Request for Enforcement Discretion remain valid. This assures continued protection of the health and safety of the public.

Also, clarification of our response to question 3 of reference 2 is required. Kewaunee Emergency Operating Procedures allow the operator to realign a high pressure safety injection train to the reactor vessel injection path vice directing the operator to complete this action. Please replace page 4 of attachment 1 to reference 2 with attachment I of this letter.

The Plant Operations Review Committee (PORC) has reviewed and endorsed this amendment to the Request for Enforcement Discretion. The current 72 hour LCO expires at 1841 (CST) on November 4, 1993. Enforcement Discretion is requested to begin at that time.

A complete copy of this submittal has been transmitted to the State of Wisconsin.

If you have any questions or require additional information, please contact me or a member of my staff.

Sincerely,



C. A. Schrock
Manager - Nuclear Engineering

DJK/cjt

Attach.

cc - US NRC - Region III
US NRC - Document Control Desk
US NRC Senior Resident Inspector
Mr. R. S. Cullen, PSCW

ATTACHMENT 1

To

Letter from C. A. SCHROCK (WPSC)

to

J. B. MARTIN (US NRC)

Dated

November 4, 1993

Amendment to Request for Enforcement Discretion

Mr. J. B. Martin
November 4, 1993
Attachment 1 Page I

3. **The safety basis for the request that Enforcement Discretion be exercised, including an evaluation of the safety significance and potential consequences of the proposed course of action.**

WPSC RESPONSE

A. PLANT DIVERSITY

The A RHR pump performs the following functions:

1. Emergency Core Cooling System (ECCS) injection on a large break Loss of Coolant Accident (LOCA).
2. Long term post accident cooling following a LOCA.
3. Decay heat removal during plant startup, shutdowns, and for non-LOCA events requiring a plant cooldown (e.g. steam generator tube rupture (SGTR), main steam line breaks (SLB), and a fire).

The first function of the A RHR pump is to provide ECCS injection to supplement the safety injection (SI) accumulators in refilling the reactor vessel on a large break LOCA. If the A RHR pump is inoperable, the B RHR pump and its associated train can perform this function. If the B RHR pump fails, then the high pressure SI pumps would continue injecting into the reactor coolant system (RCS) cold legs. Additional injection flow would be provided by operating two charging pumps at maximum speed taking suction from the RWST. If the LOCA was in an RCS cold leg, then the operator could realign the associated high pressure SI train to the reactor vessel injection path. Emergency Operating Procedures allow the operator to perform these actions.

When the RWST is depleted following a LOCA, the RHR system is switched to the recirculation mode. In this mode the RHR pump takes suction from the containment sump and can provide:

1. Injection directly into the Reactor Coolant System (RCS), or
2. Flow to the suction of the Safety Injection (SI) or Internal Containment Spray (ICS) pumps.

During the recirculation phase, decay heat is removed from the core and transferred to containment by evaporation of the water injected into the RCS by the RHR or SI pumps. The heat added to containment, if not removed, will increase containment

WPSC (414) 433-1598
TELECOPIER (414) 433-5544



NRC-93-142
EASYLINK 62891993

WISCONSIN PUBLIC SERVICE CORPORATION

600 North Adams • P.O. Box 19002 • Green Bay, WI 54307-9002

BCO / BCB (RIDS)

October 1, 1993

10 CFR 2.201

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Ladies/Gentlemen:

Docket 50-305
Operating License DPR-43
Kewaunee Nuclear Power Plant
Response to Notice of Violation 93-012-01

Reference: Letter from L.R. Greger (NRC) to C.A. Schrock (WPSC) dated September 1, 1993 (Inspection Report 93-012)

In the reference, the Nuclear Regulatory Commission (NRC) provided Wisconsin Public Service Corporation (WPSC) with the results of an inspection by Kewaunee's Resident Inspectors. During the inspection, one violation concerning a safety evaluation performed in 1991 was identified. The attachment to this letter provides our response to this violation.

Sincerely,

Charles A. Schrock

Charles A. Schrock
Manager - Nuclear Engineering

TJW/jag

Attach.

040073

cc - US NRC, Region III
US NRC Senior Resident Inspector

lic\nrcv40.wp

~~9310060244~~

OCT 04 1993

IE01
11

IA-4
dlp

ATTACHMENT 1

to the Letter

From: C.A. Schrock (WPSC)

To: Document Control Desk (NRC)

Dated: October 1, 1993

Re: Inspection Report 93-012

NUCLEAR REGULATORY COMMISSION (NRC) NOTICE OF VIOLATION

During an NRC inspection conducted from May 28 through July 31, 1993, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violation is listed below:

10 CFR Part 50.59 "Changes, Tests and Experiments," requires, in part, that records of changes made to the facility, as described in the safety analysis report, shall provide the bases for the determination that the change does not involve an unreviewed safety question.

Contrary to the above, Safety Evaluation Report, Revision 0, dated March 8, 1991, for DCR 2373-2, "Control Room Post-Accident Recirculation Dampers ACC-3A & ACC-3B and Fresh Inlet Damper ACC-2," did not identify that the change created the possibility of a different type of malfunction than previously evaluated in the safety analysis report, did not adequately determine if the change involved an unreviewed safety question, and consequently did not provide an adequate bases for the determination that the change did not involve an unreviewed safety question. (305/93012-01)

This is a Severity Level IV violation.

WISCONSIN PUBLIC SERVICE'S (WPSC'S) RESPONSE

Design Change Request (DCR) 2373-2 was implemented in April 1991 to remove the interlock between the fresh air inlet damper (ACC-2) and the redundant recirculation dampers (ACC-3A and ACC-3B) in the control room post-accident recirculation (CRPR) system, refer to attachment 2. Removal of the interlock prevents a single failure of ACC-2 from isolating recirculation flow through ACC-3A or ACC-3B. As noted in the inspection report, the design package for the DCR failed to provide adequate justification that the removal of the interlock did not increase the probability of bypassing the charcoal filters. Bypassing the filters would allow unfiltered contaminated air to enter the control room.

In addition to the weakness described in the inspection report, an additional weakness was also identified in the implementation of DCR 2373-2 with regard to follow-up documentation. As part of the modification process, the project manager is required to submit a revision to the Updated Safety Analysis Report (USAR) to reflect the current design of the plant. The engineer responsible for the DCR and USAR updates revised the USAR to reflect the removal of the interlock. However, the revision to the USAR was not consistent with the steps in the emergency operating procedure for the CRPR system. The USAR states dampers ACC-3A and ACC-3B will be closed once damper ACC-2 is opened. However, Emergency Operating Procedure E-ACC-25, "Emergency Control Room A/C System Operation," does not direct the operators to close dampers ACC-3A or ACC-3B.

Upon being notified by the NRC of these concerns, additional analysis was performed which demonstrated the modification and procedure did not present an unreviewed safety question. This analysis was documented in a supplement to the original safety analysis for DCR 2373-2.

Due to the time that has elapsed since the modification was installed, a conclusive cause could not be determined. The investigation into this violation did identify the following as the two most likely causes:

1. During the design of the modification, organizational changes required the project to be reassigned to a different engineer, resulting in a loss of continuity in the project.
2. The method used to perform design changes was not conducive to continuity or communications between the design change group and plant groups.

During the design phase of this DCR, the responsible engineer was assigned to a different department. As a result, the project was reassigned to a different engineer. The major focus of the design change was on the electrical aspects of removal of the interlock and not the functional performance of the system. Both engineers remember talking about the need to address the possibility of outside air bypassing the filters during the transition phase of the project. However, a review of the design package found no evidence that the issue was ever resolved. Therefore, it appears that this concern was lost in the transition. In this time period, DCRs were performed using Kewaunee engineering resources as project managers dependent upon contract engineers for technical support. One project manager would be responsible for several projects. Furthermore, once a preliminary design was approved, communications between the project manager and plant groups affected by the change decreased significantly until the design was ready for installation.

To address concerns similar to the one cited in the inspection report, Kewaunee reorganized its engineering department in October 1991 and has added significant resources to provide in-house engineering expertise. The project manager now works with an in-house design team throughout the project. The team consists of the project manager, design engineering, and the affected departments. This typically includes multi-disciplined engineering, operations, and maintenance personnel. The team approach to design changes adds continuity to the design process and improves communication between work groups. As a result, when changes are made to the USAR or other documents, they are more likely to receive a thorough review.

In addition to the corrective actions already taken, the USAR will be revised to reflect how the system is described in operating procedure E-ACC-25. The annual update to the USAR is currently scheduled to be submitted to the NRC in November 1994. Furthermore, DCR 2373-2 will be used as a case study in the refresher training on the performance of safety evaluations. The training is tentatively scheduled to occur during the first quarter of 1994. The training will be provided to members of the engineering staff that are typically responsible for performing safety evaluations.

ATTACHMENT 2

to the Letter

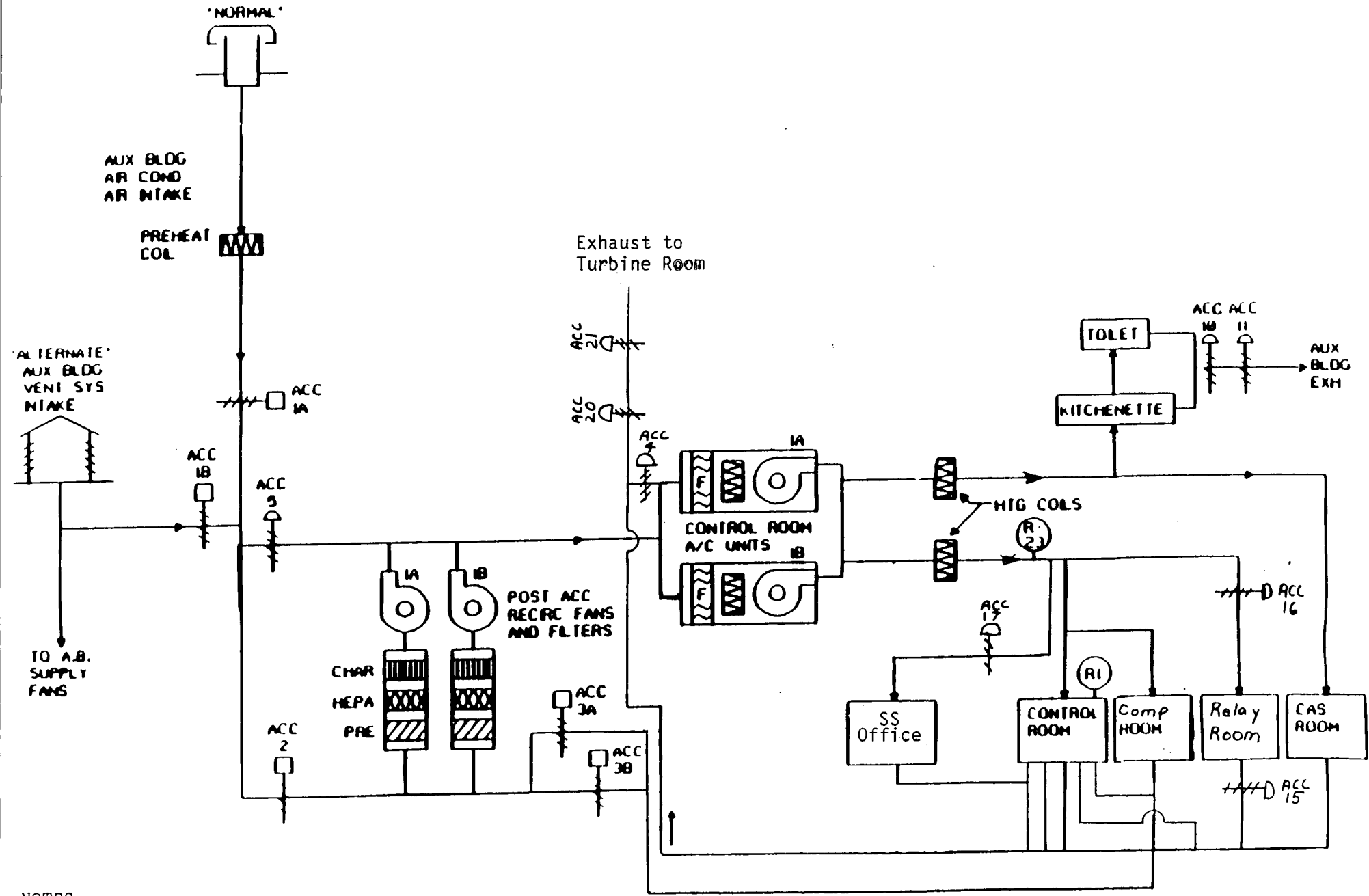
From: C.A. Schrock (WPSC)

To: Document Control Desk (NRC)

Dated: October 1, 1993

Re: Inspection Report 93-012

CONTROL ROOM AIR CONDITIONING



NOTES:

1. For Information Only
2. Refer to DWG Operation M-603