REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:7911140282 DOC.DATE: 79/11/08 NOTARIZED: NO DOCKET #
FACIL:50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana & 05000315
50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana & 05000316
AUTH.NAME AUTHOR AFFILIATION
DOLAN,J.E. Indiana & Michigan Power Co.
RECIP.NAME RECIPIENT AFFILIATION
DENTON,H.R. Office of Nuclear Reactor Regulation

SUBJECT: Provides chronological summary for Jul 1977-June 1979 correspondence on containment purging & venting during norm operation, in response to NRC 790927 ltr. Also discusses NRC 791128 ltr re overriding safety actuation signals.

DISTRIBUTION CODE: A001S COPIES RECEIVED:LTR 1 ENCL 0 SIZE: 4
TITLE: General Distribution for after Issuance of Operating Lic

NOTES: I&E - 3 cys ALL MATL.

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
ACTION:	05 BC ORB #1	7	7			
INTERNAL	01 REG FILE	1	1	02 NRC PDR	1	1
	12 I&E	2	2	14 TA/EDO	1	1
	15 CORE PERF BR	1	1	17 ENGR BR	1	1
	18 REAC SFTY BR	1	1	19 PLANT SYS BR	1	1
	20 EEB	1	1	21 EFLT TRT SYS	1	1
	22 BRINKMAN	1	1	EPB-DOR	1	1
	OELD	1	0			
EXTERNAL:	03 LPDR	1	1	04 NSIC	1	1
	23 ACRS	16	16			

NOV 15 1979

MA 4

TOTAL NUMBER OF COPIES REQUIRED: LTTR 39 ENCL 38

60

INDIANA & MICHIGAN POWER COMPANY
P. O. BOX 18
BOWLING GREEN STATION
NEW YORK, N. Y. 10004

November 8, 1979
AEP:NRC:00295

Donald C. Cook Nuclear Plant Units 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Denton:

This letter responds to Mr. D. Eisenhut's letter of September 27, 1979 which dealt with containment purging and venting during normal operation. We received Mr. Eisenhut's letter on October 15, 1979.

The subject of Mr. Eisenhut's letter was a part of the licensing proceedings of Unit 2 of the Cook Plant. Our initial responses to your staff's concerns were provided in Appendix Q to the FSAR, Amendments 77 and 78, in July and October of 1977 respectively. Since then we have sought resolution of this issue in an ongoing effort to justify unrestricted purge operation in Cook Plant. Our request for a Technical Specification change on this matter still remains open. The following list provides a chronological summary of the correspondence, relevant to this issue, on Cook Plant.

(1) Our response to Questions 022.4 and 022.13 contained in Appendix Q, Amendments 77 and 78 to the FSAR, submitted in July and October 1977 respectively. This provided our response to Branch Technical Position CSB 6-4 including the impact on ECCS performance and an evaluation of the radiological consequences of a design basis accident during purge operation. The responses to Questions 022.4 and 022.13 apply to both Units of the Cook Plant.

(2) Our submittal of December 29, 1977 on Unit 2 provided the procedure for the valve operability test. The scope of this test procedure was reviewed with members of your staff prior to our submittal. This applies to both Units 1 and 2 of the Cook Nuclear Plant.

A001
S
1/0

P

(3) Our submittal of January 13, 1978 on Unit 2 provided the results of the in situ purge valve operability test performed on January 8, 1978. This test was a pre-requisite for allowing unrestricted purging of the containment in accordance with our response to Containment Systems Branch Question 022.4 of our FSAR. The test results demonstrated that the purge valves are capable of closing against the dynamic forces of a design basis loss-of-coolant accident. These results were submitted to the Commission in support of our Technical Specification change request on Unit 2 to allow unrestricted purging of the containment. This test, its results and the various supporting analyses we have performed address the concerns expressed in Mr. Eisenhut's letter and no further action is required. This applies to both Units 1 and 2 of the Cook Plant.

(4) Our submittal of February 3, 1978 on Unit 2 provided supplemental information requested by your staff concerning the results of the valve operability test in support of our Technical Specification change request. This applies to both Units 1 and 2 of the Cook Plant.

(5) Our submittal of April 27, 1978 on Unit 2 supplied analyses that demonstrate the operability of the lower compartment purge system based on the test already performed. The analysis provided shows that although lower compartment pressures might be higher than the test pressure, the pressures expected at the inboard containment isolation valves in the lower compartment purge and vent lines would be less than the pressure which existed during the valve operability test. This is achieved by installing debris screens in the lower compartment purge systems which provide a high flow resistance. This applies to both Units 1 and 2 of the Cook Plant.

(6) Our submittal of August 11, 1978 (AEP:NRC:00069)on Unit 2 provided additional information requested by your staff and applies to both Units of the Cook Plant.

(7) Our submittal of September 11, 1978 (AEP:NRC:00082) on Unit 2 provided sensitivity analyses of the resistance coefficients for the elbows and debris screens and the dependence on those coefficients of the resulting torque and applies to both Units 1 and 2 of the Cook Plant.

(8) Our submittal of January 4, 1979 (AEP:NRC:00114) on Units 1 and 2 provided our response to Mr. Schwencer's November 28, 1978 letter. All of the requests for additional information and justification of unlimited purging were provided. Additionally, we provided our review of the issue of overriding of safety actuation signals and the procedural steps taken to assure that operation of a bypass will not affect safety functions.

(9) Our meeting with the NRC staff on May 31, 1979 to discuss the status of review of the containment purge and related subjects. The NRC staff informed us that we had a favorable write-off as far as valve operability was concerned. However we were told that the NRC staff required further action from AEP on the issue of manual override of safety actuation signals.

(10) Our submittal of June 8, 1979 (AEP:NRC:00114A), applicable to Units 1 and 2 provided a description of the modifications made to the reset/block circuits and associated procedural changes required to meet the Commission's position as committed to at the May 31, 1979 meeting.

(11) Our submittal of June 29, 1979 (AEP:NRC:00114B) on both Units 1 and 2 provided the additional information on the subject of unrestricted purging that was requested at the May 31, 1979 meeting.

With regard to the issue of overriding of safety actuation signals as described in Mr. Schwencer's November 28, 1978 letter and as supplemented by discussions at the May 31, 1979 meeting, we now consider the procedural steps and modifications made to the reset/block circuits as described in our letters of January 4, 1979 and June 8, 1979 to be final and permanent. Protective enclosures have been provided over the reset switches (push buttons) to facilitate the administrative controls governing their use. Purge isolation valve circuits have been modified such that the valves will also receive a trip close signal from a Containment Isolation - Phase A signal. This signal will directly trip the valves closed regardless of the condition of the Containment Ventilation Isolation reset/block circuits. Finally, we have provided annunciation when the reset is used whether or not any automatic safety actuation signals are overridden by this action. We indicated at the May 31, 1979 meeting and in our June 8, 1979 letter that safety injection actuation has multiple inputs and that changes to this logic involve circuits in the solid state protection system (SSPS) which require Westinghouse's input to be performed. We have been informed by Westinghouse, after their discussion with Mr. J. T. Beard of your staff, that no changes to the reset/block circuits in the safety injection actuation logic, other than those indicated in our June 8, 1979 letter, are required. The manual blocks and resets in the safeguards actuating logic are required by the design of the systems they control. For example, these manual blocks and resets are used to terminate safety injection and switch over to recirculation and to permit the operator to take over manual control of the tripped reactor to complete the shutdown process. The

safeguards actuation manual blocks and resets have been reviewed and approved by the NRC on numerous applications and are fully documented in Safety Analysis Reports and in Reference Emergency Operating Instructions for Westinghouse NSSS plants. This completes the review of the overriding of safety actuation signals and fulfills the commitment made to provide further information in our June 8, 1979 letter.

We have taken adequate steps to allow unrestricted purge operation in the Cook Plant. We have complied with all of the requests of your staff for information, analyses, modifications and procedures. We reiterate our request for completion of the NRC staff's review of our request for a Technical Specification change on Unit 2 and further request removal of the 90 hour per year limit of purge operation on Unit 1. We would like to resolve this issue without delay to prevent unnecessary operational hardships for the Cook Plant personnel.

Very truly yours,

John E. Dolan

JED:em

John E. Dolan
Vice President

cc: R. C. Callen
G. Charnoff
R. S. Hunter
R. W. Jurgensen
D. V. Shaller -Bridgman