



John C. Brons
Executive Vice President
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December 30, 1987
IPN-87-061

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

Subject: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
Revisions to Previous Authority Letters

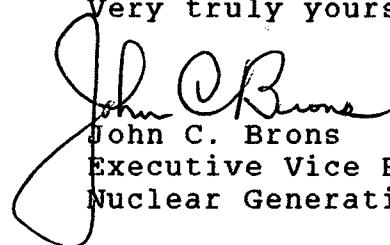
- References:
1. Letter from Mr. John C. Brons to the NRC, dated September 21, 1987, entitled: Response to Generic Letter 87-12, "Loss of Residual Heat Removal While Reactor Coolant System is Partially Filled."
 2. Letter from Mr. John C. Brons to the NRC, dated November 13, 1987, entitled: Safety System Outage Modification Inspection (Design) Report 87-013.

Dear Sir:

The Authority has reviewed References 1 and 2 and has discovered that editorial errors exist in each. The purpose of this letter is to provide the NRC with the necessary corrections. Enclosures I and II contain the corrected pages for References 1 and 2 respectively.

Should you or your staff have any questions regarding this matter, please contact Mr. P. Kokolakis of my staff.

Very truly yours,


John C. Brons
Executive Vice President
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cc: Resident Inspector's Office
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Enclosure I to IPN-87-061
Correction to Reference 1

New York Power Authority
Indian Point 3 Nuclear Power Plant
Docket No. 50-286
DPR-64

readily restored to operation and core cooling is necessary.

For any loss of residual heat removal flow that would require implementing off normal operating procedure ONOP-RHR-1, the operator is immediately directed to the Emergency Plan Procedure Document (Table 4.1) for classification of the event. In accordance with Table 4.1 entry into procedure ONOP-RHR-1 requires an "ALERT" classification (complete loss of any function needed for cold shutdown). Under 10 CFR 50.72 declaration of any of the Emergency Classes specified in the emergency plan requires notification of the NRC Operations Center via the Emergency Notification System not later than one hour after the time of declaration. Depending on the details of any particular loss of RHR event, other notification and reporting requirements of 10 CFR 50.72 and 10 CFR 50.73 could be invoked.

Item 6. REQUEST

A brief description of training provided to operators and other affected personnel that is specific to the issue of operation while the RCS is partially filled. We are particularly interested in such areas as maintenance personnel training regarding avoidance of perturbing the NSSS and response to loss of decay heat removal while the RCS is partially filled.

RESPONSE

Tygon hose level indicating system and RCS drain down operations are covered in the Reactor Coolant System Lesson Plan which is presented to licensed and non-licensed operators (NLOs) on a biennial basis. Industry event lessons are taught on a regular basis consistent with the training cycle and operational needs. The IP-3 Training Department plans to cover several INPO event reports on the subject of decay heat removal loss before the end of the 1987 training year. Emphasis in the past on decay heat removal event lessons has been on the significance of the RHR system, the impact on the NSSS of its loss and the need to exercise great care when performing evolutions which could perturb RHR.

The dynamics of operating centrifugal pumps including cavitation and net positive suction head are taught in the Fluid Mechanics Course. In pump operability testing NLOs are informed about the different types of cavitation which include traveling, fixed and vortex cavitation. The NLOs are also instructed on ways to detect cavitation by observation in the field and through instrument indication of pump parameters.

Item 7. REQUEST

Identification of additional resources provided to the operators while the RCS is partially filled, such as assignment of additional personnel with specialized knowledge

Enclosure II to IPN-87-061
Correction to Reference 2

New York Power Authority
Indian Point 3 Nuclear Power Plant
Docket No. 50-286
DPR-64

TABLE OF CONTENTS

	<u>PAGE</u>
I. SUMMARY	1
II. CHRONOLOGY OF DEVELOPMENT	2
1. Safety Review	2
2. Pipe Break Study	3
3. Adequacy of the Pipe Break Model	4
III. REGULATORY AND TECHNICAL CONSIDERATIONS	6
1. General Design Criteria	6
2. SECY-77-439	8
3. Formulation of Passive Failure Criteria	8
4. Probabilistic Risk Assessment	12
5. Safety Evaluation	13
IV. RESULTS OF ANALYSIS	14
V. CONCLUSIONS	15
VI. REFERENCES	16

IV. RESULTS OF ANALYSIS

Utilizing the line break criteria as identified in Section III, and developed from SRP 3.6.1 and 3.6.2, the following passive failures were analyzed for the SWS piping during the recirculation phase following a LOCA with loss of instrument air:

A.	24" essential header crack	Low River Water Level
B.	20" essential header crack	Low River Water Level
C.	20" non-essential header crack	Low River Water Level
D.	18" essential header crack	Low River Water Level
E.	10" essential header crack	Low River Water Level
F.	10" non-essential header crack	Low River Water Level

The flow distributions calculated for these cracks are within the capability of the SWS pumps.

EVALUATION OF THE CURRENT AUTHORITY'S IN-HOUSE
PIPE SUPPORT BASE PLATE DESIGN PROCEDURE
USING CONCRETE EXPANSION ANCHOR BOLTS

An evaluation was performed to demonstrate the adequacy of the current in-house methodology for designing pipe support base plates using concrete expansion anchor bolts.

Currently, the Authority uses the design approach outlined in the July 6, 1979 NRC submittal (IPN-79-45) in response to I.E. Bulletin 79-02 with the following three changes:

(Attachment 1 of the IPN-79-45 submittal is attached for reference Appendix A).

- (1) Prying factor (α) is equal to 1.0 for $a + b \leq 6t$. The prying factor differs from the submittal in that it does not increase the design tension load on the concrete expansion anchor bolt for base plates with $2t < a + b \leq 6t$.
- (2) The shear/tension interaction equation uses a power factor of 5/2 vs. 3/2. The interaction equation differs from the submittal in that it increases the allowable shear/tension interaction loading on the concrete expansion anchor bolts to conform with test results.
- (3) The moment arm (h_2) is equal to (d) for $2t < a + b \leq 6t$. The moment arm differs from the submittal in that it decreases the effective moment arm from $(d + 2t)$ to (d) , thus increasing the calculated design bolt tension proportionally.

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TO: NAC Document Control

CONTROL COPY NO.: 25

FROM: TERRY RYAN

DATE: 12/21/87

SUBJECT: DISTRIBUTION OF THE INDIAN POINT #3 EMERGENCY PLAN REVISIONS

The enclosed sheets are revisions to your controlled copy of the IP-3 Emergency Plan. Please discard the old sheets, insert the attached sheets, initial/date this transmittal sheet, and return it to Ms. Terry Ryan, IP-3 Documents Supervisor. Thank you.

VOLUME I - EMERGENCY PLAN - No Change.

OLD:

NEW:

VOLUME II - EMERGENCY RESPONSE ACTIVATION - No Change.

OLD:

NEW:

VOLUME III - EMERGENCY PLAN IMPLEMENTING PROCEDURES

OLD:

NEW:

Volume III Index - Rev. 46

IP-1003, Rev. 6 (all)

IP-1053, Rev. 4 (all)

IP-1057, Rev. 1 (all)

IP-1059, Rev. 1 (cover sheet)

IP-1070, Rev. 15 (all)

IP-1080, Rev. 7 (all)

IP-1085, Rev. 0 (all)

Volume III Index - Rev. 47

IP-1003, Rev. 7 (all)

IP-1053, Rev. 5 (all)

IP-1057, Rev. 2 (all)

IP-1059, Rev. 1 (cover sheet)

IP-1070, Rev. 16 (all)

IP-1080, Rev. 8 (all)

IP-1085, Rev. 1 (all)

I acknowledge the receipt of these revisions to the IP-3 Emergency Plan.

(Signature)

(Date)

Enclosures
MAC-01/mm

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