

C 04/04, 1978

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)  
DISTRIBUTION FOR INCOMING MATERIAL

50-289

REC: REID R W  
NRC

ORG: HERBEIN J G  
METROPOL EDISON

DOCDATE: 03/27/78  
DATE RCVD: 03/31/78

DOCTYPE: LETTER  
SUBJECT: FURNISHING INFO CONCERNING FEED-WATER LINE BREAK ACCIDENT RESULTS PREVIOUSLY  
SUBMITTED AND ANTICIPATED VALUES OBTAINED BY LINEAR INTERPOLATION, IN REGARDS  
TO ISSUANCE OF AMEND 28 TO OPERATING LIC NO DPR-50.

COPIES RECEIVED  
LTR 1 ENCL 0

PLANT NAME: THREE MILE ISLAND - UNIT 1

REVIEWER INITIAL: XJM  
DISTRIBUTOR INITIAL: DL

\*\*\*\*\* DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS \*\*\*\*\*

GENERAL DISTRIBUTION FOR AFTER ISSUANCE OF OPERATING LICENSE.  
(DISTRIBUTION CODE A001)

FOR ACTION: BR CHIEF REID\*\*LTR ONLY(7)

INTERNAL: REG FILE\*\*LTR ONLY(1)  
~~1\*\*LTR ONLY(1)~~  
HANAUER\*\*LTR ONLY(1)  
EISENHUT\*\*LTR ONLY(1)  
BAER\*\*LTR ONLY(1)  
GRIMES\*\*LTR ONLY(1)  
J. MCGOUGH\*\*LTR ONLY(1)

NRC PDR\*\*LTR ONLY(1)  
OELD\*\*LTR ONLY(1)  
CHECK\*\*LTR ONLY(1)  
SHAO\*\*LTR ONLY(1)  
BUTLER\*\*LTR ONLY(1)  
J COLLINS\*\*LTR ONLY(1)

EXTERNAL: LPDR'S  
HARRISBURG, PA\*\*LTR ONLY(1)  
TIC\*\*LTR ONLY(1)  
NSIC\*\*LTR ONLY(1)  
ACRS CAT B\*\*LTR ONLY(16)

DISTRIBUTION: LTR 40 ENCL 0  
SIZE: 2P

CONTROL NBR: 780930024

\*\*\*\*\* THE END \*\*\*\*\*

1489 038  
7910240 80.9 P



METROPOLITAN EDISON COMPANY

REGULATORY SECRET FILE

POST OFFICE BOX 542 READING, PENNSYLVANIA 19603

TELEPHONE 215 - 929-3601

March 27, 1978  
GQL 0510

Director, Nuclear Reactor Regulation  
Attn: R. W. Reid, Chief  
Operating Reactors Branch No. 4  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

MAR 2 1978  
U.S. NUCLEAR REGULATORY  
COMMISSION  
Mail Section

Dear Sir:

Three Mile Island Nuclear Station Unit 1 (TMI-1)  
Operating License No. DPR-50  
Docket No. 50-289

High Pressure Trip and Pressurizer Code Safety Valve Settings

Your letter of April 6, 1977, issuing Amendment No. 28 to Met-Ed Operating License No. DPR-50 for TMI-1, approved an increase in the settings for the High Pressure Trip and Pressurizer Code Safety Valves through Cycle 3 only. Furthermore, you stated that to eliminate the need to address these settings separately for future cycles, Met-Ed should commit to add the Feedwater Line Break accident to those accidents already regularly considered in connection with each reload.

It has been Met-Ed's contention that the Feedwater Line Break Analysis, showing the insensitivities to Moderator and Doppler Coefficients, would justify the 2405 psig High Pressure Trip Setpoint and 2500 psig Pressurizer Code Safety Valve Setting on a permanent basis. The following Tables provide the Feedwater Line Break Accident Results previously submitted and anticipated values obtained by linear interpolation.

Feedwater Line Break Accident Results (Previously Submitted)

Case	High Pressure Trip Setpoint, psig	Moderator Coef. $10^{-4} \Delta k/k/^\circ F$	Doppler Coef. $10^{-5} \Delta k/k/^\circ F$	Pressure, psia
1. Cycle 1	2355	+0.5	-1.17	2637
2. Cycle 2	2355	-1.06	-1.49	2633
3. Cycle 2	2405	-1.06	-1.49	2653

Feedwater Line Break Accident Results (Anticipated)\*

4. Cycle 3	2355	-0.91	-1.47	2633.4
5. Cycle 3	2405	-0.91	-1.47	2655.4
6. Cycle 4	2355	-0.63	-1.49	2634.1
7. Cycle 4	2405	-0.63	-1.49	2656.1

\*Anticipated values using the BOC (most positive) Moderator and Doppler Coefficients.

1489 039  
790930024

Acc  
4/10

Mr. R. W. Reid, Chief

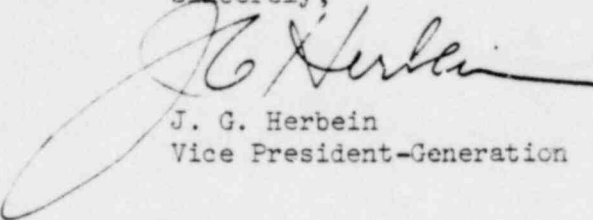
- 2 -

March 27, 1978  
GQL 0510

As indicated in the table, wide variations in Moderator and Doppler coefficients have no significant effect on the pressure. This is as expected; i.e., the Feed-water Line Break accident occurs so rapidly that the coefficients do not see the transient.

In view of the above, sufficient justification exists to warrant the permanent settings of 2405 psig and 2500 psig for the High Pressure Trip and Pressurizer Code Safety valves, respectively.

Sincerely,



J. G. Herbein  
Vice President-Generation

JGH:RJS:cjg

1489 040