



METROPOLITAN EDISON COMPANY

POST OFFICE BOX 542 READING, PENNSYLVANIA 19603

TELEPHONE 215 - 929-3601

December 13, 1978

GQL 1784

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

Dear Sir:

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

In response to Question 8 of your letter of August 17, 1978, by letter of August 28, 1978 (GQL 1451), Met-Ed committed to provide by December 31, 1978, a list of systems served by cables routed through the area between the fuel pool and the Control Building and an analysis demonstrating that a fire in the area would not affect the ability to safely shut down the reactor.

Attached is a list of systems served by the cables in that area.

The analysis was performed as follows:

1. The Engineered Safeguards (ES) cable tray sections in the area were identified.
2. All circuits for safe reactor shutdown were determined.
3. All systems and equipment served by these cables were identified.
4. The analysis was performed on an elevation-by-elevation basis assuming total loss by fire of all cables of an elevation in the subject area. This insured that the ability to safely shut down the reactor would not be compromised.

The results of the evaluation indicate that the reactor can be brought to the safe shutdown condition for the following reasons:

1. The only safety-related channels in the area are the B and C channels. Since the A safety-related channel is not routed through the area, this redundant channel would be available to bring the reactor to the safe shutdown condition.
2. There is only one area where the B and C channels are in close proximity.

7812190113

A006
S/1
F

Mr. R. W. Reid, Chief

- 2 -

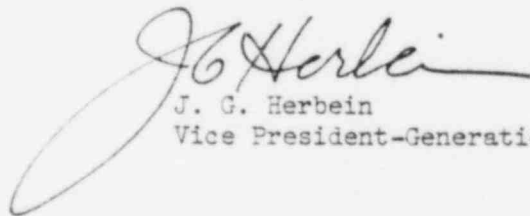
December 13, 1978
GQL 1784

This is the 338' 6" elevation of the Control Building. The separation between channels is three (3) feet vertically (between trays 239 and 241, B and C channels, respectively) and one (1) foot horizontally (between trays 127 and 141, B and C channels, respectively). However, there is a horizontal fire barrier between trays 239 and 241 and a metal "kick plate" between trays 127 and 241.

3. The combustible loading in the area is very low, consisting mostly of cable insulation.
4. There are no ES power cables on the 338' 6" elevation, thus eliminating a possible ignition source.
5. Upon completion of the penetration sealing program, there will be fire barriers where cable trays penetrate the walls and floors of the subject area to eliminate the possibility of a fire in an adjacent area propagating along a cable tray into the subject area.

Based on the above, Met-Ed feels that no additional fire protection measures are necessary.

Sincerely,



J. G. Herbein
Vice President-Generation

JGH:WSS:cjg

B CHANNEL EQUIPMENT

AH-D-37A	DH-V-6B
AH-D-39A	DH-V-7B
AH-E-15B	DR-P-1B
AH-E-18B	DR-V-1B
AH-E-19B	DS-P-1B
AH-E-27B	EG-P-1B
AH-V-1C	FW-V-93A
BS-V-1B	IC-V-2
BS-V-2B	MU-P-1C
BS-V-3B	MU-P-3C
BS-V-4B	MU-V-2A
CA-V-1	MU-V-2B
CA-V-3	MU-V-14B
CA-V-4B	MU-V-16C
CA-V-13	MU-V-16D
CF-V-20A	MU-V-37
CF-V-20B	NR-P-1C
DF-P-1C	NR-V-4B
DH-P-1B	NS-V-35
DH-V-4B	RR-P-1B
DH-V-5B	RR-V-1B
	RR-V-10B

C CHANNEL EQUIPMENT

AH-E-1C

NR-V-1B

CF-V-19A

NS-V-15

CF-V-19B

NS-V-32

MU-P-2B

NS-V-52C

MU-P-3B

NS-V-53C

MU-V-18

RB-V-2*

MU-V-20

RB-V-7

NR-P-1B

RR-V-3C

NR-P-1C

RR-V-5

RR-V-6

B Channel Systems

Air Handling

Make-up and Purification

Diesel Generator Fuel Oil

Diesel Generator

Feedwater

Building Spray

Decay Heat Removal

Intermediate Cooling

Chemical Addition

Nuclear Services Cooling - River Water

Nuclear Services Closed Cycle Cooling

Water Gas

Waste Liquid

Electrical Switchgear Control

Decay Heat - River Water

Reactor Building Emergency Cooling - River Water

Engineered Safeguard

Fluid Block

Penetration Pressurization

Core Flooding

0

C Channel Systems

Make-up and Purification

Nuclear Services Cooling River Water

Nuclear Services Closed Cycle Cooling

Industrial Coolant System

Reactor Building Emergency Cooling River Water

Air Handling

Chemical Addition

Building Spray

Engineered Safeguard

Intermediate Cooling

Core Flooding

Penetration Pressurization