Wayne H. Jens
Vice President
Nuclear Operations

Detroit Edison

2000 Second Avenue
Detroit, Michigan 48226
(313) 586-4150

May 8, 1984
EF2-68,302

Director of Nuclear Reactor Regulation
Attention: Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Youngblood:

Reference: Fermi 2
NRC Docket No. 50-341

Subject: Additional Information Concerning Fire Protection Features of Control Room Panels

In an April 3, 1984 meeting with Mr. Lynch of your staff and members of the Chemical Engineering Branch (Ferguson, Eberly, et al), Detroit Edison commited to notify the NRC of Edison's decision relative to the ventilation arrangement and overall fire protection design of the Fermi 2 control room panels. The Edison decision and its basis, indicating that no control room panel modifications are required and that the existing fire protection features for the panels are adequate, were provided to Mr. Ferguson and Mr. Eberly in an April 17, 1984 telephone conversation. Mr. Ferguson requested Detroit Edison document the basis for this decision. Accordingly this basis is provided below.

I. The fire loading in these panels is light (see attached Figure).

PANEL #	TOTAL BTU	EQUIVALENT FIRE
601	778,000	12 min.
602	892,000	14 min.
808	557,000	09 min.
809	334,000	05 min.
810	446,000	07 min.
817	502,000	08 min.

The above information is based on cross linked polyethylene cable insulation conservative estimate of cable containment per panel, and a conservative 50 square foot floor area.

A002
1/1

II. Based upon the judgement of Edison's fire protection engineer, we are convinced that 50-60% of the heat generated in a panel would go up and away from the adjacent panels with the residual heat being absorbed by the panel. It is our engineering judgement that this heat release is not sufficient to impair the function of any of the cables in the adjacent panels, since test data (3M test number 9380030601) for the Fermi 2 cables has shown them to be free of faults up to 610°F. Edison regards this test data to be equally applicable to unsheathed cables exposed to radiant heat, since the sheathing has a mimimal thermal insulating value.

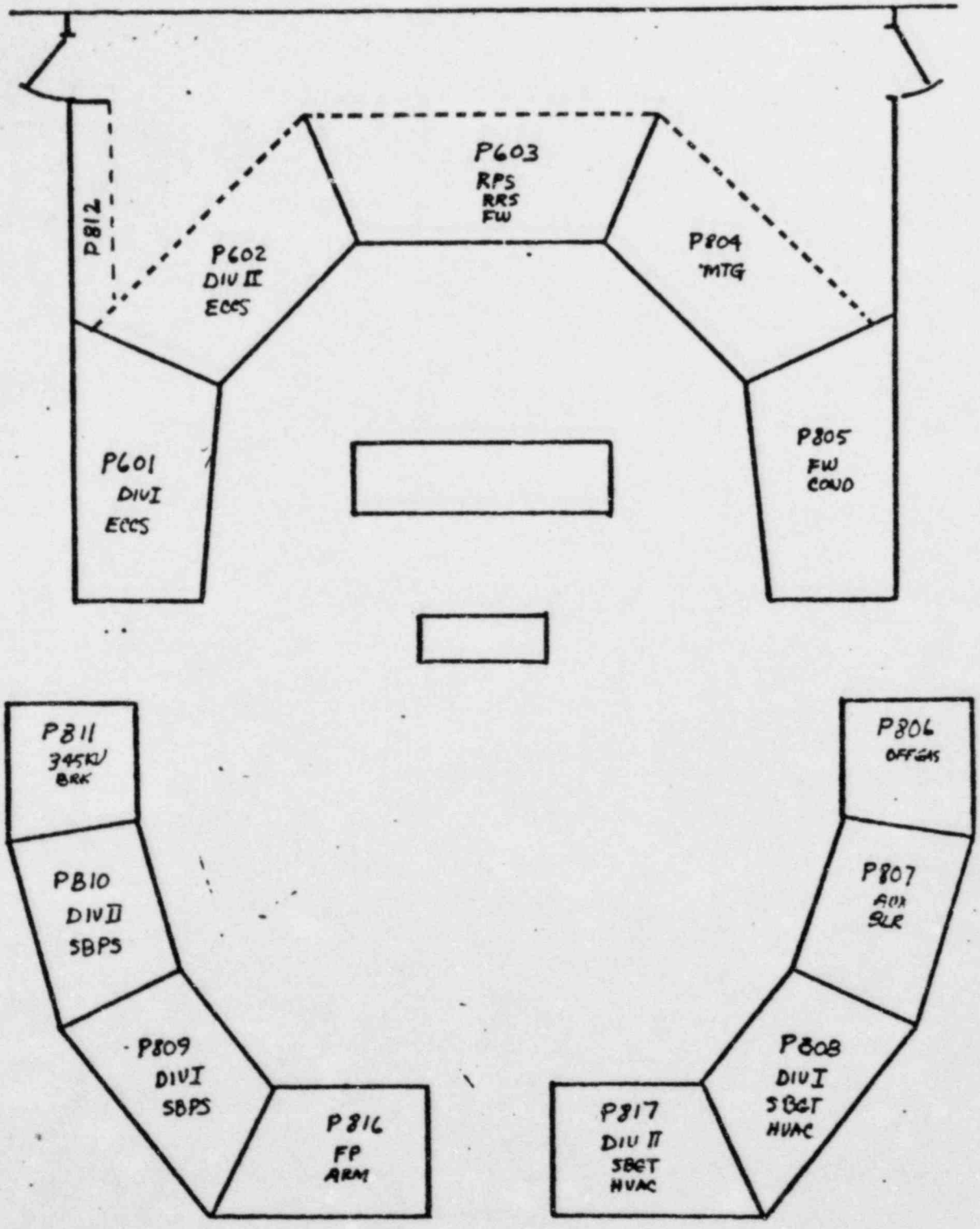
Based on the aforementioned, the Fermi 2 control room panels are adequately designed and can easily accommodate the postulated panel fire without modification. We must again state that the analyzed case probably will not exist because: 1) the panels have two (2) ionization detectors each; 2) the control room is continuously manned by well trained operators; and 3) the panels contain only low energy cables, such as control, indication, and low power circuitry for control room instrumentation.

If you should have any questions, please contact Mr. O. Keener Earle, (313) 586-4211.

Sincerely,

Wayne H. Jens

cc: Mr. P. M. Byron
Mr. M. D. Lynch
Mr. R. Eberly (NRC-ChEB)
USNRC, Document Control Desk
Washington, D.C. 20555


P603
RPS
RRS
FW
P812
P602
DIV II
ECCS
P804
MTG
P601
DIV I
ECCS
P805
FW
COND
P811
345KV
BRK
P806
OFFGAS
P810
DIV II
SBPS
P807
AUX
BLR
P809
DIV I
SBPS
P808
DIV I
SBGT
HVAC
P816
FP
ARM
P817
DIV II
SBGT
HVAC