



**Consumers  
Power  
Company**

James W Cook  
Vice President - Projects, Engineering  
and Construction

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0453

May 7, 1984

Mr Harold R Denton, Director  
Office of Nuclear Reactor Regulation  
Division of Licensing  
US Nuclear Regulatory Commission  
Washington, DC 20555

MIDLAND ENERGY CENTER  
MIDLAND DOCKET NOS 50-329, 50-330  
FIRE PROTECTION ANALYSIS AND EVALUATION  
OF MAIN CONTROL ROOM C31 CONTROL PANELS  
FILE 0485.1, B9.5.1 SERIAL 29789

REFERENCES (1) NRC 10/26/83 MEETING SUMMARY DATED 11/9/83  
(2) NRC 1/26/84 MEETING SUMMARY DATED 3/27/84

ENCLOSURE MAIN CONTROL ROOM ANALYSIS AND EVALUATION FOR  
C31 CONTROL PANELS DATED 4/19/84

In recent fire protection meetings with the NRC Staff, References 1 and 2, Consumers Power Company presented its analysis of the effects of main control room fires. During these meetings, we described our position on the protection of redundant safe shutdown systems from fire induced electrical circuit faults. As a result of these discussions, the Staff requested that a more detailed evaluation of the "Safety Parameter Display Panels," (1C31 and 2C31), be provided for review. The enclosed report, "Main Control Room Fire Analysis and Evaluation for C31 Control Panel," documents the results of this analysis.

The computer analysis performed considered, among other things, the existing C31 panel design, possible design modifications and the use of operator actions. The proposed design modifications include the installation of radiant heat shield insulation within cabinets, the use of fire dampers for cabinet ventilation vents and the use of isolation switches and/or electrical interlocks for mitigating hot shorts which may have a safety significance. Operator actions considered include use of alternate control points and electrically isolating control circuits at motor control centers. This analysis demonstrates that with the proposed combination of design modifications and operator actions there is no credible main control room fire which can preclude our ability to safely shutdown the plant.

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MAY 16 1984

*letter only*

PRINCIPAL STAFF			
EA	Shas	DEPP	
D/RA		DE	
A/RA		DEMSH	
RC		DRMA	
PAO		SCS	
SGA		ML	
ENF		File	Shas

*orig + 3 letter only*  
*attachment one in the file*

We are forwarding this enclosed report to the Staff for their evaluation in preparation for future meetings with the NRC. In the interim, we would be pleased to discuss any aspect of the enclosed evaluation with the Staff.

*James W. Cook*

JWC/MFC/bjw

CC RJCook, Midland Resident Inspector  
JGKepler, Administrator, NRC Region III  
DSHood, Licensing Branch #4  
Randy Eberly, US NRC  
Bill LeFave, US NRC

CONSUMERS POWER COMPANY  
Midland Units 1 and 2  
Docket No 50-329, 50-330

Letter Serial 29789 Dated May 7, 1984

At the request of the Commission and pursuant to the Atomic Energy Act of 1954, and the Energy Reorganization Act of 1974, as amended and the Commission's Rules and Regulations thereunder, Consumers Power Company submits its fire protection evaluation and position on the protection of safe shutdown circuitry in the C31 control room panels.

CONSUMERS POWER COMPANY

By /s/ James W Cook  
James W Cook, Vice President  
Projects, Engineering and Construction

Sworn and subscribed before me this 9th day of May 1984.

/s/ Patricia A Puffer  
Notary Public  
~~Jackson~~ County, Michigan  
Bay  
My Commission Expires 3/4/86

( S E A L )