

THE CINCINNATI GAS & ELECTRIC COMPANY



E. A. BORGMANN
VICE PRESIDENT-ENGINEERING

Docket No. 50-358

July 13, 1979

Mr. Harold Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

RE: WM. H. ZIMMER NUCLEAR POWER STATION -
UNIT 1 - AMENDMENT 95 - SUBMITTAL OF
REVISION 13 TO THE FIRE PROTECTION
EVALUATION REPORT

Dear Mr. Denton:

The Cincinnati Gas & Electric Company on behalf of itself and as agent for Columbus and Southern Ohio Electric Company and The Dayton Power and Light Company hereby submits forty (40) copies of Revision 13 to the Fire Protection Evaluation Report for the Wm. H. Zimmer Nuclear Power Station - Unit 1 (ZPS-1). This revision is in the form of change out pages to the Fire Protection Evaluation Report and a supplemental report to the Fire Protection Evaluation Report. It is entitled "Fire Protective Cable Tray Fire Test", by Melvin S. Abrams, of Construction Technology Laboratories. The supplemental report should be filed with the Fire Protection Evaluation Report as it pertains to Questions 7 and 12.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By

E. A. Borgmann
E. A. BORGMANN
Senior Vice President

EAB:dew

Enclosure

cc: Charles Bechhoefer
Glenn O. Bright
Frank F. Hooper
Troy B. Conner, Jr.
James P. Fenstermaker
Steven G. Smith
William J. Moran
J. Robert Newlin
William G. Porter, Jr.
James D. Flynn
Thomas A. Luebbers
Leak S. Kosik
John D. Woliver

State of Ohio)
County of Hamilton) ss 458 007

Sworn to and subscribed before me
this 13th day of July, 1979.

7907300387
Margaret L. Huber
Notary Public

MARGARET L. HUBER
Notary Public, State Of Ohio
My Commission Expires Aug. 13, 1983

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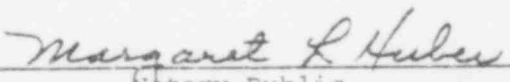
By 
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this 13th day of July, 1979.


Notary Public
MARGARET L. HUBER
Notary Public, State of Ohio
My Commission Expires Aug. 13, 1983

458 008

WM. H. ZIMMER POWER STATIONINSTRUCTIONS FOR UPDATING YOUR FIRE PROTECTION EVALUATION REPORT

Changes to the Fire Protection Evaluation Report are identified by a vertical line and revision number in the right margin of the page. To update your copy of the ZPS-1 Fire Protection Evaluation Report, remove and destroy the following pages and insert pages as indicated:

REMOVEINSERTQUESTION AND ANSWER SECTION

Page Q7-1

Page Q7-1

Page Q12-1

Pages Q12-1 and Q12-2

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The supplemental report "Fire Protective Cable Tray Fire Test" should be filed with the Fire Protection Evaluation Report.

QUESTION 7 (SECTION 8.4.2, DIVISION 1 SWITCHGEAR AREA)

"Describe the fire barriers to be provided for the Division 2 cable trays which pass through this area. Indicate the fire barrier rating to be specified."

RESPONSE

In the Division 1 switchgear area, the Division 2 (blue) redundant cable trays will be protected with Kaowool blanket material which has been qualified by test* for the tray configuration to be protected. The protective material will be of thickness as qualified by test to give a minimum 1-1/2-hour fire barrier.

Horizontal trays and vertical trays (risers) will be enclosed with a Kaowool blanket material which has been qualified to give a minimum 1-1/2 hour fire barrier by test.

*The test titled, "Fire Protective Cable Tray Fire Test, September 1978 Through January 1979, for Wm. H. Zimmer Nuclear Station," (Engineering Report Number 78-9-FP-1) was submitted in Fire Protection Revision 12.

A supplementary test titled, "Fire Protective Cable Tray Fire Test," by M. S. Abrams of Construction Technology Laboratories, a division of Portland Cement Association, June 1979, is submitted in Revision 13.

QUESTION 12 (SECTION 8.4.9, LIFT TRUCK ROUTE INTO AUXILIARY BUILDING)

- "a. Provide the results of an analysis of the effects on the redundant safety related cables and their associated systems of an exposure fire occurring in this area. Assume that the exposure fire is fueled by combustibles that are normally carried through this area by the lift trucks. If a fire should occur in this area that could not be extinguished by the sprinkler system or should the sprinkler system fail to operate, what are the consequences as they affect safe shutdown.
- "b. Provide the design criteria for the sprinkler system to be provided for this area.
- "c. This area is separated from the turbine building by a rated fire wall. A large opening is provided in this wall for the lift trucks to move between the turbine building and the reactor building. Describe the bulkhead type door, including the automatic or self-closing hardware to be provided and the fire rating of the door."

RESPONSE

- a. Cable trays and cable bus for Division 2 (blue) which cross this area will be protected by a 1-hour passive fire barrier in addition to the automatic sprinkler system. The cable trays will be protected by Kaowool blanket material (see Question 7) which has been qualified by test.*

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The Division 2 cable bus will be enclosed in a fire rated corridor which will connect the Division 2 diesel-generator room with its associated switchgear room on the opposite side of the lift truck route. Located in this corridor, the cable bus will be segregated from the lift truck route. Additional information and drawings illustrating this arrangement will be submitted in a future revision.

- b. This area is protected by an automatic wet-pipe sprinkler system based on a design density of 0.30 gpm/ft² for a total flow of 484 gpm.

The sprinkler water for this system is a separate supply from the auxiliary building fire water supply header.

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*The test titled, "Fire Protective Cable Tray Fire Test, September 1978 Through January 1979, for Wm. H. Zimmer Nuclear Station," (Engineering Report Number 78-9-FP-1) was submitted in Fire Protection Revision 12.

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- c. As shown on drawing M-426, Sheet 11, in Chapter 8, this area is separated from the other areas of the auxiliary building by fire rated walls. At this elevation the lift truck route through this auxiliary building is considered an extension of the turbine building for fire protection requirements.

The removable bulkhead wall is designed to protect safety-related areas from the design-basis flood as discussed in FSAR Subsection 2.4.1.4.

See paragraph three on Page Q5-1 for a description of the water curtain wall at the turbine room entrance to the lift truck route.

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