



# THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

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MURRAY R. EDELMAN  
VICE PRESIDENT  
NUCLEAR

December 5, 1985  
PY-CEI/NRR-0412 L

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

Perry Nuclear Power Plant  
Docket Nos. 50-440; 50-441  
Appendix R Deviation Request

Dear Mr. Youngblood:

Attached for you information is a deviation request to 10CFR50, Appendix R, associated with the Perry Nuclear Plant Unit 1. This deviation has been discussed with your staff and represents a modified plant configuration since the submittal of our June 12, 1985 deviations package.

Also attached is a revision to our index table of deviations noting this addition. If you have any questions, please feel free to call.

Very truly yours,

Murray R. Edelman  
Vice President  
Nuclear Group

MRE:njc

cc: Jay Silberg, Esq.  
John Stefano (2)  
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F PDR

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TABLE 1

Deviations from 10CFR50 Appendix R

Section III G - Safe Shutdown

<u>No.</u>	<u>Fire Zone/Area</u>	<u>Deviation</u>	<u>Status SSER 4</u>	<u>Status</u>	<u>Previous Correspondence</u>
1.	CC-1a,1b,1c	1 hr wrap barrier to barrier. Area wide suppression 20 ft. separation	Accepted	Revised	6/16/82 letter, Attachment I SSER 3.9.5.1.4.2(3)a
2.	CC-2a;2b,2c	1 hr. wrap barrier to barrier	-	New	-
3.	CC-3e	Suppression	Accepted	Revised	6/16/82 letter Attachment II SSER 9.5.1.4.2(3)a
4.	1CC-6	Suppression	Accepted	Revised	6/16/82 letter Attachment III SSER 9.5.1.4.2(3)a
5.	2CC-6	Suppression	-	New	-
6.	DG-1d	Suppression	Accepted	Revised	6/16/83 letter Attachment IV SSER 9.5.1.4.2(3)a
7.	1B-2,3,4	Lack of 3 hr. cutoff. Area wide suppression	Accepted	Revised	6/16/83 letter Attachment V SSER 9.5.1.4.2(3)b
8.	ESW-1a	Suppression	Accepted	Revised	6/16/82 letter Attachment VI SSER 9.5.1.4.2(3)a
9.	1AB-1b,3a	Suppression	---	New	---
10.	1AB-1e,3b	Suppression	---	New	---
11.	1AB-1c,2	Suppression	---	New	---
12.	1AB-1g	Suppression 20 ft. separation of equipment	---	New	---
13.	1RB-1a,1b,1c,1d	3 hr rated barriers	---	New	---
14.	CC-6	Suppression	---	New	---

Building - Control Complex  
 Fire Zone FPER Drawing  
 CC-6 E-023-019

Deviation - Area CC-6 contains circuits for both methods of safe shutdown. An automatic suppression system is not provided in the area.

A. Area Description

Area CC-6

Fire Area CC-6 is shown on drawing E-023-019. It houses Unit 1 and Unit 2 ventilation ducts and comprises the horizontal chase in the upper, east section of the control complex at elevation 693'-2". The ceiling is at the control complex roof elevation 707'-2". This area is bounded on the north and south by the outside wall, on the west side by Fire Areas 1CC-6 and 2CC-6, and on the east by the intermediate building.

The north, east and south walls of this area are constructed of reinforced concrete. The west wall is constructed of drywall. The floor is constructed of gypsum plank and drywall. Ceiling (roof) construction is reinforced concrete over steel from deck and three-hour protected framing. Walls and ceiling have three-hour fire resistance ratings. The floor provides adequate separation from other areas. Wall and floor penetrations have three-hour fire rated seals. Access to this area is through access panels from Fire Areas 1CC-6 and 2CC-6.

B. Safe Shutdown Capabilities

Safe shutdown equipment for this fire area consists of HVAC ductwork for the systems, and Unit 1, Division 1 and 2 power control cables.

Method A

COMPONENTS

<u>SYSTEM</u>	<u>COMPONENT TAG NO.</u>	<u>DESCRIPTION</u>
None		

CIRCUITS

<u>CIRCUITS</u>	<u>COMPONENT TAG NO.</u>	<u>SYSTEM</u>
1M23R9A	1M23-C001A	HVAC

RACEWAYS

1M23R9A

Method B

COMPONENTS

<u>SYSTEM</u>	<u>COMPONENT TAG NO.</u>	<u>DESCRIPTION</u>
None		

CIRCUITS

<u>CIRCUITS</u>	<u>COMPONENT TAG NO.</u>	<u>SYSTEM</u>
1M23C7B	0M23-C001B	HVAC
1M23F2B		
1M23R11B		
1M23C17B	0M23-C002B	
1M23R12B		
1M23C64B	0M23-F012B	
1M23C62B		
1M24C18B		
1M24C23B		
1M25C70B		
1C95A206B		
1M24F2B	0M24-C001B	
1M24C6B		
1M24C7B		
1M24C9B		
1M26F2B	0M26-C001B	CR-HVAC
1M25C51B	0M26-F042B	
1M25F2B	0M25-C001B	
1M25R14B		

1M25R15B		
1M25C50B	0M25-F012B	CR-HVAC
1M25C51B		
1M25C133B		
1M25R5B	0M25-N100B	
1R25B93B	1H51-P117B	Power System
1M23F4B		Associated Circuit

#### RACEWAYS

276	1383
277	1819
1325	

Fire Area CC-6 contains circuits for shutdown Method A and Method B. For this fire area, safe shutdown could be achieved utilizing Method A systems and equipment. The conduit for Method A system (1M23R9A) is separated from the redundant cables on the order of 100 feet with an absence of intervening insitu combustibles.

#### C. Fire Protection

Fire detection equipment for this area consists of ionization detectors.

Fire suppression equipment for this area consists of manual fire extinguishers and hose station locations in adjacent areas 1CC-6 and 2CC-6 which would be used in this area.

#### D. Fire Hazard Analysis

##### Type of Combustibles

This area is occupied by HVAC ducts. The only combustible loading in this area is from cable insulation concentrated on the north side of the area in three Division B cable trays that are approximately 10% full. There are also conduits to smoke and heat detectors in the fire area. The total combined load is negligible.

#### Quantity of Combustibles

Approximately 1230 BTU per square foot. Fire severity less than one minute, however, the loading is located mostly at the north side of the area.

Ease of ignition and propagation - Low

Heat release potential - Low

Suppression damage to equipment - Ductwork and cables not susceptible to damage

Area continuously manned - No

Traffic - Very Low

Fire fighting accessibility - area has low accessibility, however, the safe shutdown circuits are located near the access doors.

Conclusion - Due to the extremely low combustible loading and 100 ft. separation of the redundant circuits within this area, the level of protection provided by the detection system and manual suppression available is adequate to ensure that one division of safe shutdown equipment will remain free of fire damage.