

*PLC* *Professional Loss Control, Inc.*

STRUCTURAL STEEL ANALYSIS  
for  
LIMERICK GENERATING STATION

Control Structure El. 180'  
Corridor 164  
Fire Area 1A

December 20, 1983

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## LIMERICK GENERATING STATION

### 1. AREA DESCRIPTION

The area under consideration is Corridor 164 on the 180' elevation of the Control Structure (Fire Area 1A) (see Attachment A for sketch of area). Bounding walls are of reinforced concrete construction with an average thickness of 3 feet. Total surface area for heat transfer is approximately 2200 ft<sup>2</sup> (see Attachment A for calculation of areas).

### 2. COMBUSTIBLE LOADING

All cabling in this area is routed in conduit. There are no combustible liquids in this area.

### 3. VENTILATION PARAMETERS

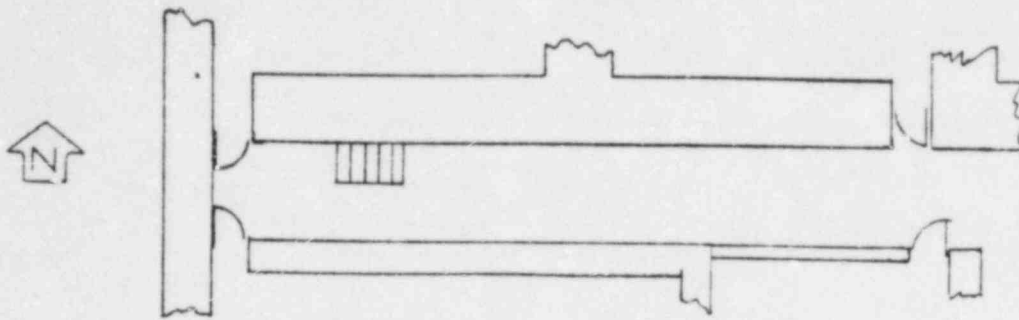
Both ends of the corridor are open. The east end opening measures 8' wide by 8' high. The west end of the corridor leads to an open stairwell serving the upper elevations.

### 4. CASES EXAMINED

With no exposed combustible cabling and no combustible liquids in the area, there is no fuel in the area to support a fire.

### 5. RESULTS

The structural steel in this area will not fail since there are no fixed combustibles in the area to support a fire.



Control Structure El. 180'  
Corridor 164

Surface Area Calculations

Walls

North wall	(50' x 18')	900 ft <sup>2</sup>
South wall	(50' x 18')	900 ft <sup>2</sup>

<u>Ceiling</u>	(50' x 8')	<u>400 ft<sup>2</sup></u>
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Total Surface Area for Heat Transfer		2200 ft <sup>2</sup>
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