

PLC *Professional Loss Control, Inc.*

STRUCTURAL STEEL ANALYSIS
for
LIMERICK GENERATING STATION

Control Structure El. 332'
Standby Gas Treatment System Access Area Room 625
Fire Area 28A

December 20, 1983

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LIMERICK GENERATING STATION

1. AREA DESCRIPTION

The area under consideration is the Standby Gas Treatment System Access Area Room 625 on the 332' elevation of the Control Structure (Fire Area 28A). The bounding walls of the area are of reinforced concrete construction with an average thickness of 2 ft. The total surface area for heat transfer is 8928 ft² (see Attachment A for sketch and calculation of surface areas).

2. COMBUSTIBLE LOADING

All cabling in this area is routed in conduit, there are no cable trays. There are no combustible liquids in this area.

3. VENTILATION PARAMETERS

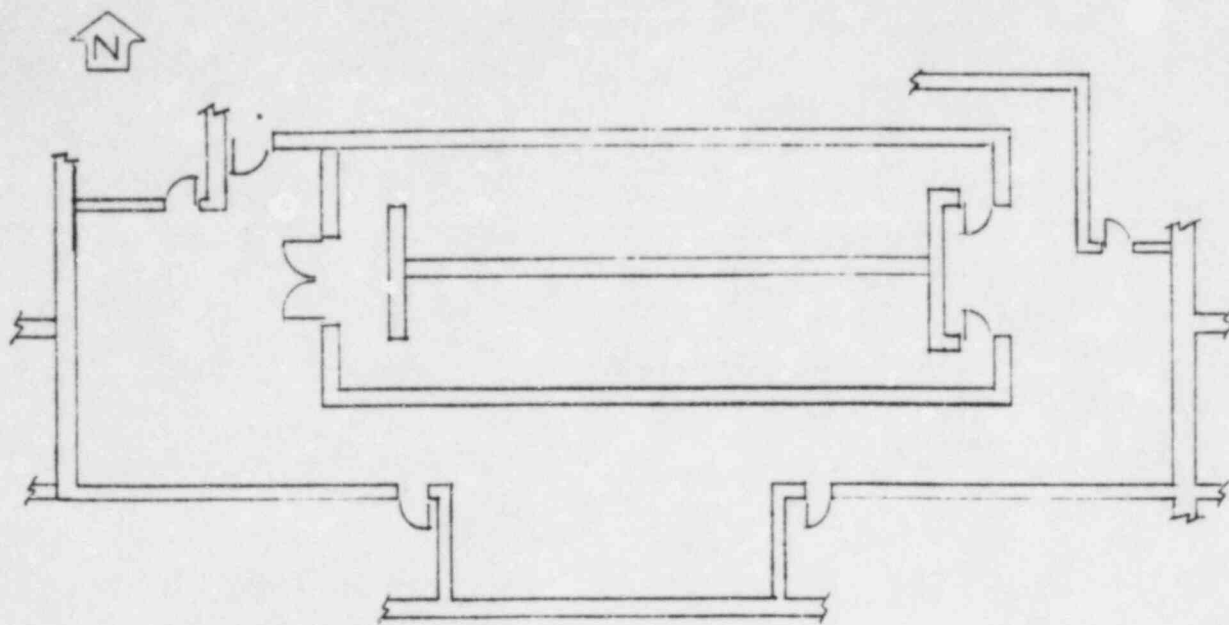
There are two doors which enter the area, each measuring 3' wide by 7' high. These doors are located along the north wall and lead into stairwells.

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 due to a fire, as there are no fixed combustibles in the area to support a fire



Control Structure El. 332'
Standby Gas Treatment System Access Area Room 625

Surface Area Calculation

Walls

North wall	(120' x 17')	2040 ft ²
South wall	(120' x 17')	2040 ft ²
East wall	(72' x 17')	1224 ft ²
West wall	(72' x 17')	1224 ft ²

Ceiling

2400 ft²

Total Surface Area for Heat Transfer

8928 ft²