

STRUCTURAL STEEL ANALYSIS
for
LIMERICK GENERATING STATION

Control Structure El. 200'
Recombiner Access Area Room 259
Fire Area 1N

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LIMERICK GENERATING STATION

1. AREA DESCRIPTION

The area under consideration is the Recombiner Access Area, Room 259, on the 200' elevation of the Control Structure (Fire Area 1N). Bounding walls are of concrete masonry units and reinforced concrete construction with an average thickness of 2 ft. The south wall of the access area is a non-fire rated barrier. The total surface area for heat transfer is 5456 ft² (see Attachment A for sketch and surface area calculations.)

2. COMBUSTIBLE LOADING

There are no cable trays or combustible liquids located in this area.

3. VENTILATION PARAMETERS

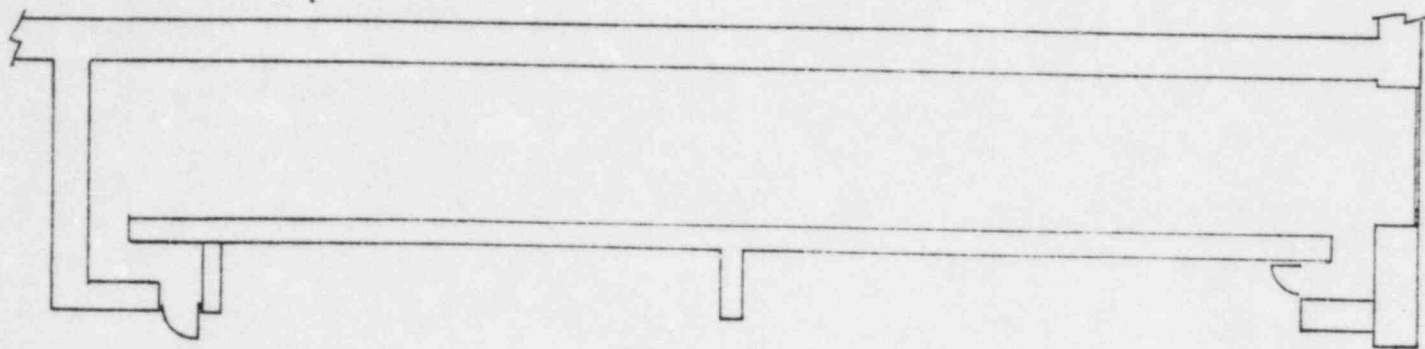
Three doors enter the area. On the east wall is a set of double doors with each leaf measuring 5' wide by 8' high. Two doors, each measuring 3' wide by 7' high, are located in the south wall.

4. CASES EXAMINED

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

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. 200'
Recombiner Access Area Room 259

Surface Area Calculation

Walls

North wall	(112' x 16')	1792 ft ²
East wall	(13' x 16')	208 ft ²
South wall	(112' x 16')	1792 ft ²
West wall	(13' x 16')	208 ft ²

4000 ft²

<u>Ceiling</u>	(112' x 13')	<u>1456 ft²</u>
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Total Surface Area for Heat Transfer	5456 ft ²
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