

STRUCTURAL STEEL ANALYSIS
for
LIMERICK GENERATING STATION

Spray Pond Pump Structure El. 168'
ESW and RHRSW Pump Area
Fire Area 122A

December 20, 1983

LIMERICK GENERATING STATION

1. AREA DESCRIPTION

The area under consideration is the ESW and RHRSW Pump Area on the 268' elevation of the Spray Pond Pump Structure (Fire Area 122A). 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 3860 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

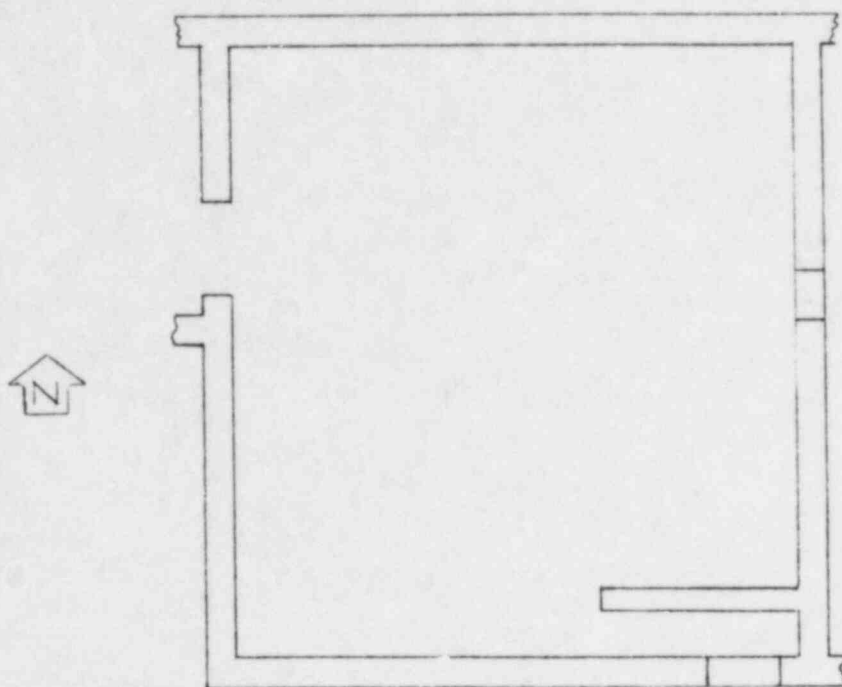
Ventilation to the area is through a doorway located in the west wall of the area.

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.



Spray Pond Pump Structure El. 268'
ESW and RHRSW Pump Area

Surface Area Calculation

<u>Walls</u>		
North wall	(38' x 15')	570 ft ²
South wall	(38' x 15')	570 ft ²
East wall	(40' x 15')	600 ft ²
West wall	(40' x 15')	600 ft ²
		<u>2340 ft²</u>
<u>Ceiling</u>	(38' x 40')	<u>1520 ft²</u>
Total Surface Area for Heat Transfer		3860 ft ²