

STRUCTURAL STEEL ANALYSIS  
for  
LIMERICK GENERATING STATION

Spray Pond Pump Structure El. 237'

RHRSW Pipeway

Fire Area 122F

December 20, 1983

8401190486 840113  
PDR ADOCK 05000352  
PDR

## LIMERICK GENERATING STATION

### 1. AREA DESCRIPTION

The area under consideration is the RHRSW Pipeway on the 237' elevation of the Spray Pond Pump Structure (Fire Area 122F). 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 1679 ft<sup>2</sup> (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

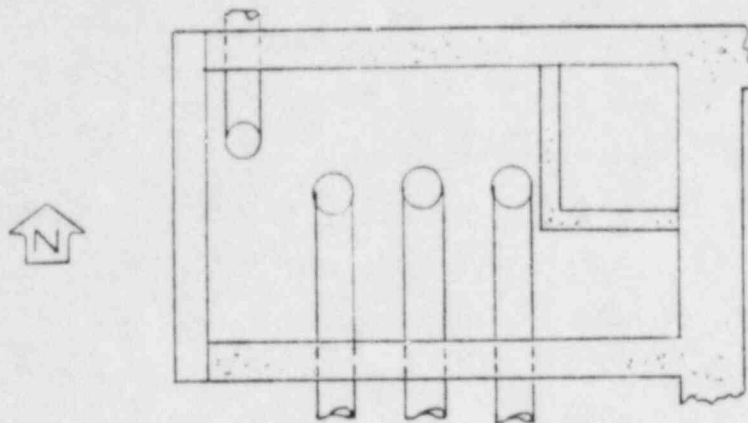
Ventilation to the area is through a hatch located on the 251' elevation in the northeast corner of Fire Area 122E.

### 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. 237'  
RHRSW Pipeway

Surface Area Calculation

Walls

North wall	(31' x 12')	372 ft <sup>2</sup>
South wall	(31' x 12')	372 ft <sup>2</sup>
East wall	(17' x 12')	204 ft <sup>2</sup>
West wall	(17' x 12')	204 ft <sup>2</sup>
		<u>1152 ft<sup>2</sup></u>

<u>Ceiling</u>	(31' x 17')	<u>527 ft<sup>2</sup></u>
----------------	-------------	---------------------------

Total Surface Area for Heat Transfer		1679 ft <sup>2</sup>
--------------------------------------	--	----------------------