

ENGINEERING REQUISITION SITE SPECIFIC DATA Section V-F

SITE SPECIFIC DATA

Location:	5 miles southeast of Pamplico, SC	
Maximum Outdoor Ambient Temperature Range (°F):	10	to 105
Design Outdoor Dry Bulb Temperature Range (Based on 99.6% (heating), 0.4% (cooling) ASHRAE 2005)	23	96
Design Indoor Ambient Temperature Range (Ventilated only), °F	55	104
Indoor Ambient Temperature Range (Control/Relay Rooms), °F	70	75
Indoor Ambient Temperature Range (Office Areas), °F	72	78
Design Indoor Ambient Temperature Range (Switchgear Areas), °F	65	104
Maximum Indoor Temperature (<40 hrs/yr Ventilated Areas/Switchgear Areas)		115
Design Outdoor Wet Bulb Temperature, °F (Coincident to 0.4% Design Cooling Dry Bulb, ASHRAE 2005)	77	
Relative Humidity, %	20	to 100
Maximum Closed Cycle Cooling Water Temperature, °F	100	
Maximum Closed Cycle Cooling Water Pressure, psig	100	
Maximum Allowable Cooling Water Pressure Drop, psi	10	
Maximum Open Cycle Cooling Water Temperature, °F	95	
Maximum Circulating Water Temperature, °F	92 – Design	95 – Max.
Maximum Allowable Circulating Water Pressure Drop, psi	10	
Instrument Air Maximum pressure, psig	125	
Instrument Air Minimum pressure, psig	80	
Instrument Air Dewpoint, °F	-40	
Service Air Maximum Pressure, psig	125	
Service Air Minimum Pressure, psig	80	
Elevation (feet above mean sea level)		67'-0"
Wind (Per IBC 2003 & ASCE 7-02)		
Basic Wind Speed, V (ASCE 7, Figure 6-1)		110 mph
Exposure Category (ASCE 7, Section 6.5.6)		C
Building & Structure Classification (ASCE 7, Table 1-1)		Category III
Importance Factor, I (ASCE 7, Table 6-1)		1.15
Rain		
Maximum 1 hour, inches		4.3
Maximum 24 hour, inches		6.75
Frost Depth, ft		0.5
Snow (Per IBC 2003 & ASCE 7-02)		
Ground Snow Load, Pg (ASCE 7, Figure 7-1)		10 psf
Exposure Factor (ASCE 7, Table 7-2)		Based on Terrain
Building & Structure Classification (ASCE 7, Table 1-1)		Category III
Importance Factor, I (ASCE 7, Table 6-1)		1.1
Seismic (Per IBC 2003)		
Site Class (IBC Table 1615.1.1)		D
Seismic Use Group (IBC Section 1616.2)		II
Design Spectral Response Acceleration, short period (Site Specific ARS, Figure 1 on V-F-2)		$S_{DS} = 0.64g$
Design Spectral Response Acceleration, 1 second period (Site Specific ARS, Figure 1 on V-F-2)		$S_{D1} = 0.43g$
Seismic Design Category (IBC Table 1616.3(1) & Table 1616.3(2))		D
Building & Structure Classification (IBC, Table 1604.5)		Category III
Importance Factor, I_E (IBC, Table 1604.5)		1.25
Notes:		
1. Site Specific Design ARS (Figure 1) represents two-thirds of the ARS of the earthquake event with a probability of exceedence of 2% in 50 years.		
Electrical Power Supplies Available (Nominal Value)		
6900 VAC, 3-phase, 60 Hz		
480 VAC, 3-phase, 60 Hz		
208 VAC 3-phase, 60 Hz		
120 VAC, 1-phase, 60 Hz		
120 VAC, 1-phase, 60 Hz, UPS Source		
125 VDC		
250 VDC		

ENGINEERING REQUISITION
ADDITIONAL REQUIREMENTS / CLARIFICATIONS
Section V-G

ADDITIONAL REQUIREMENTS / CLARIFICATIONS

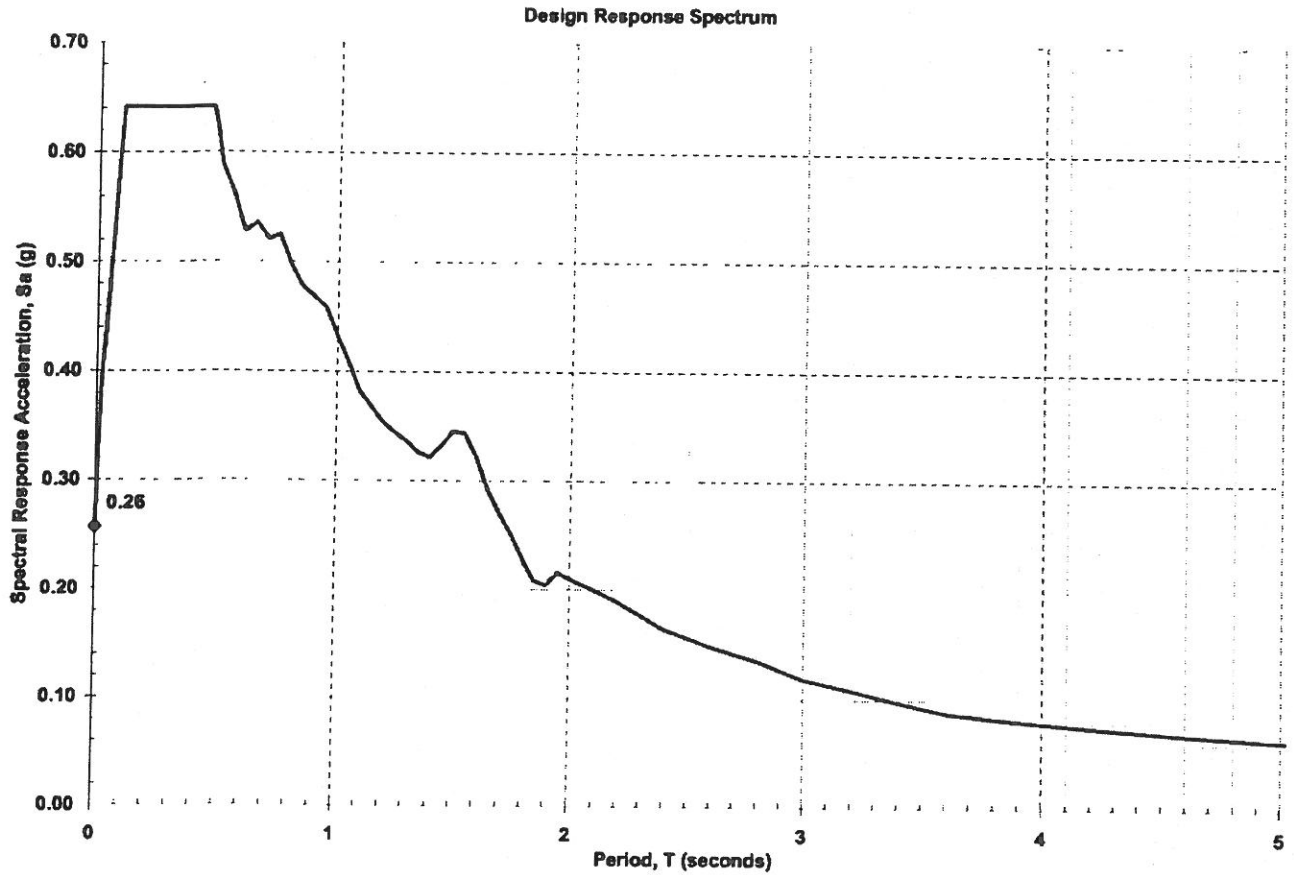


FIGURE 1.

DESIGN ACCELERATION RESPONSE SPECTRUM (ARS)
FOR GROUND SURFACE
PEE DEE GENERATING STATION