

**MPT Detail Sheet**

**GSU Transformer - Specification Summary**

Transformer Classification:	GSU	Operation:		Step-Up	
Winding Configuration:	Two windings	Vector Group:		YNd1	
Phases:	Three	Rated Frequency:		60	Hz
Continuous Ratings (MVA):	33.333	37.34			
Cooling:	ODAF	ODAF			
Temperature Rise	55°C	65°C			
Winding:	Nominal Voltage (kV)	Connection	BIL (kV)	Bushing BIL	Current minimum Rating (A)
HV:	67	Wye	350	350	400
H0	-	Wye	110	150	400
LV:	13.8	Delta	110	150	2000
X0	-	-			
<b>Tap Changer Type</b>	Steps Above	Steps Below	% Range	Total %	Location
De-Energized (DETC)	2	2	2.69	5.37	HV
On-Load (LTC)	16	16	0.675	10	HV
<b>Oil Preservation System:</b>	Nitrogen Blanket		Maximum Core Flux Density: 1.67 Tesla		
<b>Coolant Liquid:</b>	Mineral Oil type II				
<b>No Load Losses (kW)</b>		Rating:			
<b>Load Losses (kW)</b>		Rating:			
<b>% Impedance HV / LV</b>	15.1%	Rating:	33.3%		
<b>Sound Level dB(A):</b>	72	dB(A) at No-Load w/all cooling			
<b>Lightning Arrestors Rating (kV):</b>	HV:	57	LV:	10	MCOV
<b>Current Transformers</b>	Ratio (A)	Accuracy	Quantity	type	leads
HV winding	600:5	C800	6	Multi-ratio	5
Hot-spot CT					
HV Neutral	600:5	C400	1	Multi-ratio	5
LV winding	1200:5	C800	6	Multi-ratio	5
Hot-spot CT	1200:5		1		
LV Neutral					
<b>Site Conditions</b>					
Site Design Temperature Range		Average Annual Precipitation (in)			
Site Design Elevation (ft)	3300	Storm intensity 10 year - 1 hour (in/hr)			
Ambient Temperature Rating (°C)		Maximum Storm intensity 1 hour (in/hr)			
Reference Wind Velocity		Seismic Load			
<b>Loss Evaluation:</b> the following penalties will be assigned to transformer losses for evaluation					
\$	5,200	/ kW No-Load at 100% voltage rating and 20C			
\$	1,800	/ kW Load at 85 C (ONAN)			
\$	-	/ kW Auxiliary, ONAF rating			
Quantity: 1					
Location: 2274 Custer Ave., Fayetteville, NC 28312					
Delivery to Site Date:					
Available for Energization Date:					
Technical Contact: Joel C. Valley					
Telephone number: 910-257-2198					
email address: <a href="mailto:joel.valley@faypwc.com">joel.valley@faypwc.com</a>					
<b>Notes:</b>					