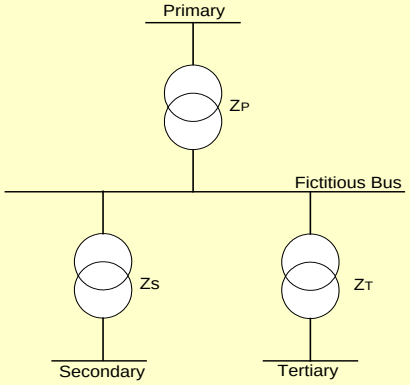
TABLE 12 – POWER/PHASE-SHIFT TRANSFORMER DATA (400/230kV, 230/66kV, 230/22kV where applicable)			
To be completed by Market Participant (with initial and company stamp on every page)			
Description of Data Submission (Choose one.):			
Preliminary/As-Built Submission	Choose one.		
Name of Substation:			
Name of Transformer:			
Manufacturer, Country:			
Model:			
Type:	Choose one.		
Commissioned Date: (dd/mm/yyyy)			
Original Commissioned Date (dd/mm/yyyy) (for re-commissioning equipment)			
Construction: (shell/core/etc.)	Choose one.		
Configuration:	Choose one.		
Vector Group:	Choose one.		
Cooling Method:			
Rated Capacity:			
• Continuous Rating (CR):	MVA		
• Emergency Rating:	*Submit overload capability curve*		
➢ 110% of CR	MVA,	Duration:	
➢ 120% of CR	MVA,	Duration:	
➢ 130% of CR	MVA,	Duration:	
➢ 140% of CR	MVA,	Duration:	
➢ 150% of CR	MVA,	Duration:	
➢ > 150% of CR	MVA,	Duration:	
Rated Voltage:	Primary	kV	
	Secondary	kV	
	Tertiary	kV	
Short Circuit Current Withstand Capacity:	Primary	kA (rms)	
	Secondary	kA (rms)	
	Tertiary	kA (rms)	
Nominal Voltage:	Primary	kV	
	Secondary	kV	
	Tertiary	kV	
Minimum Voltage:	Primary	kV	
	Secondary	kV	
	Tertiary	kV	
Maximum Voltage:	Primary	kV	
	Secondary	kV	
	Tertiary	kV	
Tap Changer:	Type:	Choose one.	
	Nominal tap:		
	Tap setting:		
	Range: +	%	
	Range: -	%	
	Step size:	%	
	Tap side	Choose one.	
	Step Angle (for PST)	radians	
Positive Sequence Impedance *(to provide derivation of Resistance and Reactance)*: Base MVA = 100MVA Base kV = Equipment Rated Voltage		R	X
	Primary – Secondary (ZPS)	%	%
	Primary – Tertiary (ZPT)	%	%
	Secondary – Tertiary (ZST)	%	%
	Primary (ZP)	%	%
	Secondary (ZS)	%	%
	Tertiary (ZT)	%	%

Name of Applicant:	Designation of Applicant:	Company Name:	Signature of Applicant:

TABLE 12 – POWER/PHASE-SHIFT TRANSFORMER DATA (400/230kV, 230/66kV, 230/22kV where applicable)			
To be completed by Market Participant (with initial and company stamp on every page)			
Zero Sequence Impedance *(to provide derivation of Resistance and Reactance)*: Base MVA = 100MVA Base kV = Equipment Rated Voltage		R	X
	Primary – Secondary (ZPS)	%	%
	Primary – Tertiary (ZPT)	%	%
	Secondary – Tertiary (ZST)	%	%
	Primary (ZP)	%	%
	Secondary (ZS)	%	%
	Tertiary (ZT)	%	%
Shunt Susceptance:			%
Primary Side Neutral Grounded?	Choose one.		
If yes, Ground Resistance:			Ohm
Ground Reactance:			Ohm
Secondary Side Neutral Grounded?	Choose one.		
If yes, Ground Resistance:			Ohm
Ground Reactance:			Ohm
Tertiary Side Neutral Grounded?	Choose one.		
If yes, Ground Resistance:			Ohm
Ground Reactance:			Ohm
For Overcurrent Relay:	Time multiplier:		
	Plug multiplier:		
	CT ratio:		
Magnetising Curve: (*to indicate references of submission)*			
Transformer Iron (Fixed) Loss:			MW
Magnetising Current:			A
Transformer Copper Losses: *(to provide loss curve if available)*			
• @ 25% Rated Capacity			kW
• @ 50% Rated Capacity			kW
• @ 75% Rated Capacity			kW
• @ 100% Rated Capacity			
➢ Maximum Tap			kW
➢ Minimum Tap			kW
➢ Nominal Tap			kW
Single Line Diagram (Choose one.)			

To be completed by PSO				
B1 – B2 – B3 (Primary – Fictitious):				
From TA (B1 – B2 – B3):				Choose one.
To TA (B1 – B2 – B3):				Choose one.
B1 – B2 – B3 (Secondary–Fictitious):				
From TA (B1 – B2 – B3):				Choose one.
To TA (B1 – B2 – B3):				Choose one.
B1 – B2 – B3 (Tertiary - Fictitious):				
From TA (B1 – B2 – B3):				Choose one.
To TA (B1 – B2 – B3):				Choose one.
	$Z_S = \frac{Z_{PS} + Z_{ST} - Z_{PT}}{2}$ $Z_P = \frac{Z_{PT} + Z_{PS} - Z_{ST}}{2}$ $Z_T = \frac{Z_{ST} + Z_{PT} - Z_{PS}}{2}$			
Additional Information:	^ *Denotes a space*			

Name of Applicant:	Designation of Applicant:	Company Name:	Signature of Applicant: