

Annexure -III BREAK-UP OF MANDATORY SPARES

S.No	Description	Unit	Qty.
			<b>400/230kV Tuticorin-II GIS</b>
<b>1</b>	<b>SPARES FOR 336KV SURGE ARRESTER</b>		
a)	Complete LA, 1-ph, with insulating base	Nos.	1
b)	Surge Counter/Monitor	Nos.	2
<b>2</b>	<b>Spares for 220kV CVT</b>		
a)	220kV, 4400pF, 1-ph., CVT	Nos	1
<b>3</b>	<b>SPARES FOR 216KV SURGE ARRESTER</b>		
a)	Complete LA, 1-ph, with insulating base	Nos.	1
b)	Surge Counter/Monitor	Nos.	2
<b>4</b>	<b>Relay and Protn panel spare</b>		
a)	Transformer Differential protection relay	Nos.	1
b)	Transformer Restricted earth fault relay type with non-linear resistor	Nos.	1
c)	Transformer Overcurrent, E/F Relay	Nos.	1
d)	Transformer Backup Impedance Relay	Nos.	1
e)	Numerical Line differential Main-I Relay	Set	1
f)	Numerical Line differential Main-II Relay	Set	1
<b>5</b>	<b>Spares for Substation Automation System</b>		
a)	Bay Control Unit (IED) of Main System	Nos.	1
c)	Ethernet switch suitable for 19" Rack Mounting: Ports: 24 Fiber Optic Ports	Nos.	1
<b>6</b>	<b>Spares for Fire Protection System</b>		
a)	Deluge Valve (1 no. of each type)	Set.	1

*Technical Specification, Section – Project*

*Technical Specification for 400kV GIS Extn Substation Package SS-156 Extension of 400/230kV Tuticorin-II GIS Substation*