

**PACKAGE - 1 BOQ FOR EXTENDED HT PANEL & MODIFICATION WORK AT DERC-AIIMS**

<b>S. No.</b>	<b>Item Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate in figures</b> (in Rs.)	<b>Rate in words</b> (in Rs.)	<b>Amount</b> (in Rs.)
1	<b><u>11 KV EXTENSION BOARD</u></b>					
	Supply, delivery, erection, testing and commissioning of Extended Switch board of two panels, 800A,11 kV, 3 Phase, 50 Hz., metal clad, dead front, 350MVA rupturing capacity, Extendible Type ( for future expansion of panel), Vacuum Circuit Breaker Incoming & Bus coupler to be augmented with existing 3 panel switch board of Areva make in S/S of Dental center as per the detailed specifications including connections, getting approval from Statutory bodies etc. complete with following as required.	1	Set			
	<b>INCOMER :</b>					
	1 No. 800A, 11kV, 3 Phase, 50Hz., metal clad, dead front, 350 MVA rupturing capacity, Fully Draw out type, Vacuum Circuit Breaker (VCB)					
	1 set of 11kV/110V Potential Transformers of class 0.5, 100 VA burden with HRC fuses					
	1 Set of Phase indicating lamps with HRC fuses					
	1 No. 0-15 kV voltmeter with selector switch					
	1 set of indicating lamps to indicate OPEN, CLOSE, TRIP, SPRING CHARGED, TRIP CIRCUIT HEALTHY					
	2 No. Push button for CLOSE and TRIP					
	1 set of 300/150/5-5A Current Transformer for metering of class 0.5, min. 15 VA Burden and protection 5P10					
	1 No. 0-150 Amps ammeter with selector switch					
	1 Set of O/C & E/F relay (numeric type)					
	1 Set of under voltage relay and Over voltage relay (numeric type)					
	Auxiliary Relay with shunt trip coil.					

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	1 No. Master Trip relay (numeric type)					
	1 No. Power factor meter					
	1 No. Tri Vector Meter					
	1 No. Frequency meter					
	1 No. Hooter					
	1 No. power pack of suitable capacity for all panels.					
	<b>BUSBARS :</b>					
	11kV, 350 MVA, 800 Amps Three Phase busbars of Copper					
	<b>BUS COUPLER :</b>					
	1 No. 800A, 11kV, 3 Phase, 50Hz., metal clad, dead front, 350 MVA rupturing capacity, Fully Draw out type, Vacuum Circuit Breaker (VCB)					
	1 set of indicating lamps to indicate OPEN, CLOSE, TRIP, SPRING CHARGED, TRIP CIRCUIT HEALTHY					
	2 No. Push button for CLOSE and TRIP					
	1No. Trip circuit supervision relay					
	<b>Interlocking :</b>					
	All necessary wiring for interlocking of above two panels with existing I/C-1					

S. No.	Item Description	Qty	Unit	Rate in figures	Rate in words	Amount
				(in Rs.)	(in Rs.)	(in Rs.)
2	Supply, Installtion, Testing and commissioning of a set of 3 nos. of PT of 11KV/110V of class 0.5 for metering core in the Incomer -1/outgoing/ bus bar of existing HT Panel . The PT shall be cast resin type along with PT fuse of required rating, other detail & specification shall be same as the existing PT in the panel.The work also includes removal of existing PTs if required, testing from NDMC and getting the approval for charging the electrical connection from NDMC.	2	Set			
3	Supply, Installtion, Testing and commissioning of a set of 3 nos. of CT of 150/5/5A ,of class 0.5 for metering core in the outgoing / Incomer -1 of existing HT Panel . The CT shall be cast resin type of required rating, other detail & specification shall be same as the existing CT in the panel.The work also includes removal of existing CTs if required, testing from NDMC and getting the approval for charging the electrical connection from NDMC.	2	Set			
4	Supply, Installtion, Testing and commissioning of a set of Numeric relays for O/C, E/F , O/V, U/V, High speed master trip and trip circuit supervision including necessary wiring in the existing Incomer / Outgoing boards and making the panel complete with required protection.The work also includes testing from NDMC and getting the approval for charging the electrical connection from NDMC.	1	Set			
5	Supply, Installtion, Testing and commissioning of a set of Energy meter including necessary wiring and Box for Outgoing boards and making the panel complete with required metering.	2	Set			
<b>TOTAL</b>						