

## 8. Electrical and Instrument works

For the Electrical and Instrument works necessary for the smooth operation of the complete Tank Farm and Jet A-1 Pipeline including modifications to the existing terminal facility at Muthurajawela, cost of the supply of all materials shall be included in the BOQ, but not limited to the cost of the supply of all materials which shall include, but not limited to, materials purchase price, works inspection and testing, certification, transportation, handling, preservation as per manufacturer recommendations, loading, off-loading, insurances, identification and traceability control, stock keeping, inventory control and storage, painting and cable trenches where applicable as well as consultant's fees (if applicable) and government's fees and necessary charges subject to the approval of the Employer.

### 8.1 Electrical

Item No.	Item		Unit	Quantity	Total Amount		Taxes / (SLR)	
	Description	Reference			Local Component (Without Taxes)/(SLR)	Foreign Component (Without Taxes)/(USD)	Import Taxes	Other Taxes
8.1.1	Power supply to the Tank farm and Block Valve Stations(BVS) along the Jet A-1 transfer pipeline. The power supply shall be arranged from Ceylon Electricity Board (CEB) on behalf of CPC at the cost of the contractor. (Excluding security deposits for CEB. Refer Shedule of Prices subclause 10.5)	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.2	Electrical works of sub Station not limiting to installation of electrical MV/LV switch gears, MV/LV Distribution bus bars and other accessories.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.3	Supply and install the MV/LV Electrical power distribution system from MV/LV bus bars to electrical loads and services including switch gears and cabling, completely.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.4	Supply and install Power distribution Transformer (33kV/6kV) with capacity 2MVA minimum as per specifications and drawings.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.5	Power distribution Transformer (6kV/0.4kV) with capacity of 800kVA minimum as per specifications and drawings.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.6	Supply and install Medium Voltage VFD units for Transfer Pumps as per specifications.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.7	Supply & Install sound proof 1,250kVA minimum prime rated generator with associated facilities and connection to power distribution bus bars through auto transfer switch (ATS) with back synchronizing facility.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.8	Supply and install adequate capacity online industrial type UPS system for instrumentation, control and other systems necessary for the smooth operation of the complete Tank Farm and Jet A-1 Pipeline.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.9	Supply and install Power factor improvement to the entire electrical system of Tank Farm.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				

8.1.10	Supply and install Motor Control Stations (MV & LV) and associated equipment as per specifications and drawings.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.11	Supply and install MOV Panel and associated equipment as per specifications and drawings.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.12	Supply and install explosion proof lighting for tank farm and BVS where ever necessary, weather proof road lighting, perimeter fence lighting and flood lighting system, building lighting, for the complete site, including wiring.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.13	Supply and install, lightning protection and earthing systems, for tanks, buildings & structures and other equipment, completely.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.14	Supply and install a Cathodic protection system (including test points) for Tanks, Jet A-1 Pipeline and all other underground piping sections and structures, completely.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.15	Supply and install grid connected hybrid type solar power system with adequate capacity for all BVSS of Jet A-1 Pipeline, completely.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.16	Supply and install explosion proof receptacles (3 $\phi$ & 1 $\phi$ ) to serve power for portable lighting, tools and welding etc. for Tank Farm and Jet A-1 Pipeline BVSS.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Lot				
8.1.17	Supply and install all internal cabling complete with accessories and supporting systems.	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Item				
8.1.18	Supply and Install overhead cranes (02 Nos.) with adequate capacity for pump house and generator house	Refer to Employer's Requirements and Technical Scope of Work for EPC Turnkey Contractors	Item	Item				
8.1.19	Any other items not covered under this Schedule of Prices but necessary for the smooth operation of the complete Tank Farm and Jet A-1 Pipeline. (Bidder to Specify)	<i>Specify here:</i>	Item	Lot				
<b>Sub Total</b>								