बिहार सरकार

बिहार राज्य शैक्षणिक आधारभूत संरचना विकास निगम लि०

BIHAR STATE EDUCATIONAL INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

(A Govt. of Bihar Undertaking)

ISO 9001; 14001; OHSAS 18001

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दर आमंत्रण हेतु अल्पकालीन कोटेशन आमंत्रण सूचना संख्या–12 वर्ष–2020–21

बिहार राज्य शैक्षणिक आधारभूत संरचना विकास निगम लि० पटना के निबंधित संवेदकों/ख्याति प्राप्त फर्मों/कंपनियों से दिनांकः– 15.09.2020 के अपराहन 03:00 बजे तक राज्य के विभिन्न जिलान्तर्गत विभिन्न निर्माण कार्यो में प्रयोग हेतु Electrical Panel से संबंधित कार्यो हेतु गैर अनुसूचित मदों की आपूर्ति एवं अधिष्ठापन के लिए निम्नांकित मदों हेतु मुहरबंद कोटेशन अधीक्षण अभियंता, बिहार राज्य शैक्षणिक आधारभूत संरचना विकास निगम लि०, पटना के कार्यालय में प्राप्त किया जाएगा एवं उसी दिन अपराहन 03:30 बजे कोटेशनदाताओं या उनके अधिकृत प्रतिनिधियों के समक्ष खोला जाएगा।

Sl. No.	Description of items	Qty	Unit	Rate In Digits	Rate In Words
1	Design,manufacturing,assembling,wiring,supply,installation,testing and commissioning of the following extensible cubicle type indoor mounting,dead front,fully compartementalised with hinged lockable detachable from& backl openable,dust and vermin proof,floor mounting sheet steel clad switchboard fabricated out of 2 mm thick CRCA powder coated sheet steel suitable for use at 415 volt 3 phase 4wire 50 cycle system,BMS Compiatable and to withsatans a symmetrical fault level of below mentioned kA at 415 volt. panels shall be fabricated in easily transportable sections,length,height,depth etc.to match with site condition,complete in all respect. INCOMER:- 1). 1 Nos.160 Amps. TPN MCCB(25 KA) Breaking capacity. 2). 1 Set of RYB phase Indication lamps with suitable rating MCB 3). 1 Set of ON/OFF Indication lamps along with 2A SP MCB backup protecting. 4).1 set Digital Ampere meter with suitable rating CT and selector switch 5). 1 set Digital Volt meter with suitable rating MCBs and selector switch Busbar Electrolytic high conductivity aluminium three phas and neutral busbars rated at 415V, 125 amps,35 kA,insulated with heat shrinkable coloured PVC sleeves & clip on shrounds for joints. The busbar sizing calculations shall be sumitted for approval,considering all derating factors. 3 Nos. 40 Amps. TPN MCCB(16 KA) with electronic releases. Outgoings 1) 4 No.40 amp FP MCB of 10 kA breaking capacity. 2) 5 No.63 amp FP MCB of 10 kA breaking capacity.	1	Each		

2	ELECTRICAL PANELS Design,manufacturing,assembling,wiring,supply,installation,testing and commissioning of the following extensible cubicle type indoor mounting,dead front,fully compartementalised with hinged lockable detachable from& backl openable,dust and vermin proof,floor mounting sheet steel clad switchboard fabricated out of 2 mm thick CRCA powder coated sheet steel suitable for use at 415 volt 3 phase 4wire 50 cycle system,BMS Compiatable and to withsatans a symmetrical fault level of below mentioned kA at 415 volt. panels shall be fabricated in easily transportable sections,length,height,depth etc.to match with site condition,complete in all respect. INCOMER:-1). 1 Nos.160 Amps. TPN MCCB(25 KA) Breaking capacity.2). 1 Set of RYB phase Indication lamps with suitable rating MCB3). 1 Set of ON/OFF Indication lamps along with 2A SP MCB backup protecting.4).1 set Digital Ampere meter with suitable rating CT and selector switch 5). 1 set Digital Volt meter with suitable rating MCBs and selector switch BusbarElectrolytic high conductivity aluminium three phas and neutral busbars rated at 415V, 500 amps,35 kA,insulated with heat shrinkable coloured PVC sleeves & clip on shrounds for joints. The busbar sizing calculations shall be sumitted for approval,considering all derating factors. 3 Nos. 40 Amps. TPN MCCB(16 KA) with electronic releases.Outgoings1 No.100 amp FP MCCB of 30 kA breaking capacity. (UPS)1 NO 400 AMP FP MCCB of 30 kA breaking capacity (Rising Main)1 NO 400 AMP FP MCCB of 30 kA breaking capacity (spare)1 NO 100 AMP FP MCCB of 30 kA breaking capacity (spare)	1	Each		
3	LIFT PANEL Design,manufacturing,assembling,wiring,supply,installation,testing and commissioning of the following extensible cubicle type indoor mounting,dead front,fully compartementalised with hinged lockable detachable from& backl openable,dust and vermin proof,floor mounting sheet steel clad switchboard fabricated out of 2 mm thick CRCA powder coated sheet steel suitable for use at 415 volt 3 phase 4wire 50 cycle system,BMS Compiatable and to withsatans a symmetrical fault level of below mentioned kA at 415 volt. panels shall be fabricated in easily transportable sections,length,height,depth etc.to match with site condition,complete in all respectINCOMER:1 Nos. 160A TPN feeder each having one no. 160A TPN MCCB's with microprocessor based releases with isolable neutral ,ON indication1 no. multifunction meter (showing all power parameters), with selector switch, matching cast resin CT's.BUS BARA set of TPN Aluminium bus bar with heat Shrink Sleeve rated for 200A (after considering all necessary deratings) 3 phase 4wire, 50Hz. A suitable minimum derating factor must be taken for calculation of bus bar sizes. The bus bar size after derating shall be equal to the ampere given Maximum current density of 1 Amp per sq.mm is suitable for the busbar.OUTGOING5 nos 63 A TPN MCB's with indication lampsOther items such as 1 Lot of control wiring 1 Set of designation plates all complete job as per direction of E/I.	1	Each		
4	Supplying, Installing, Commissioning, Testing Generator 100 KVA with autostart facility of make-make- Kirloskar / ashok Layland/Steerling/Cummin including connection testing, commissioning etc as required all complete job as per direction of EI.				

5	Supplying, Installing, Commissioning, Testing Generator 400 KVA with autostart facility of make-make- Kirloskar / ashok Layland/Steerling/Cummin including connection testing, commissioning etc as required all complete job as per direction of EI.				
6	Supplying/Receiving, Installation/Erection, Testing and Commissioning of 500 KVA TRANSFORMER, Copper wound 11/0.433 KV, 50 C/S, Delta star connected, Dyn11 vector group, Oil immersed Outdoor transformer with Off Load circuit Tap changer for Voltage regulation from -10% to +15% in 7 steps of 1.25% on HV side complete with AVR and RTCC panel, including Bucholtz relay, MOG, Oil & Winding temperature alarm and trip contacts with wiring upto marshalling box,and all standard accessories as required, complete with Cable End box suitable for 1RX3C x 95sq.mm. 11 KV(UE) XLPE insulated Al. Ar. Cable at HT side and XLPE insulated Al. Busduct for LT side, including S/F of M.S. channel of size 100 x 50 x 6mm for foundation support for transformer,including Drying/filteration of oil of transformer and OLTC Enclousere.Connection with Tap Changing Mechanism etc. as per IS 2026-1977 and as per direction of Engineer-in-Charge.Make :- ABB/ Schneider/Siemens/ Sterling as per direction of E/I.	1	Set		
7	LT SWITCHBOARD				
	Design, Fabrication, Supply, Erection,Testing and commisioning of Powder coated Main LT Switchboard fabricated out of 14 guage CRCA sheet steel in cubical, compartmentallised, free standing floor /wall mounted, dust and vermin proof, (degree ofprotection IP42)with reinforcement of suitable size angle iron, channel, T - iron or flats as required. Cable gland plates shall be provided on top as well as bottom of the panels. Panels shall be treated with all anti-corrosive process before painting as per specification. Panels shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels. Approval shall be taken for each panel before fabrication. All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated as per specification and direction of Engineer-in-Charge. LT Switchboard shall be comprising broadly of the following equipments. Make :- ABB/L&T/Sterling as per direction of E/I.				
	2 Incomers each 1000Amps, S.C.C 50kA for 1 Sec ACB (EDO)				
	1 Buscoupler 1000Amps, S.C.C 50kA for 1 Sec ACB				
	Outgoing Feeders (MCCB, P2, S.C.C 35kA)				
	400 Amps - 2 Nos.				
	250 Amps - 8 Nos.				
	100 Amps - 8 Nos.				
	Aluminium Bus 1000 Amps, S.C.C 40kA for 1 Sec				
	CT, PT, MCBs, Ammeter, Voltmeter with Selector Switches, Energy meter ,indication lamps(On- Off Trip, Power On - RYB)				
	630Amps Isolator, S.C.C 35kA for interconnection with DG Set				
	Supply, Testing, Installation & Commisioning of LT Switchboard (Indoor Type)	1	Set		

8	200KVAR APFC PANEL				
	Supply, Testing, Installation & Commisioning cost of 200KVAR APFC Panel having enclosure made of Powder coated 14 guage CRCA sheet steel in cubical, compartmentallised, free standing , dust and vermin proof, (degree of protection-IP42)with reinforcement of suitable size angle iron, channel, T -iron or flats, cable gland plates etc as required and direction of Engineer-in-Charge, having following components/equipment :- Make:- ABB/L&T/Sterling as per direction of E/I.				
	Incomer : 400A TP+N MCCB 36kA With Microprocessor Based Release (O/C,S/C) Protection & Rom+1C/O Aux+Trip Contact				
	Outgoing : 250A TP+N MCCB 35kA With Thermal Magnetic Based Release (O/C,S/C) Protection & Rom				
	8 Stage APFCR Relay				
	Louver With Fan				
	Indication lamps(On- Off Trip Power On -- RYB)				
	Supply, Testing, Installation & Commisioning of 200KVAR APFC PANEL (Indoor Type)	2	Set		
9	AC DISTRIBUTION BOARD				
	Design, Fabrication, Supply, Erection,Testing and Commisioning of Powder coated AC Distribution boards , fabricated out of 14 guage CRCA sheet steel in cubical, compartmentallised, free standing , dust and vermin proof, (degree of protection-IP42)with reinforcement of suitable size angle iron, channel, T -iron or flats as required. Cable gland plates shall be provided on top as well as bottom of the panels. Panels shall be treated with all anti-corrosive process before painting as per specification. Panels shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)As per Specification and direction of Engineer-in-Charge. Make :- Schneider/Legrand/L&T/Sterling as per direction of E/I.				
	Each ACDB shall be comprising of the following eequipment/components broadly:				
	250 A TPN , MCCB, P-2 Incomer- 1nos.				
	100A TPN MCB, Outgoing feeders - 02 Nos.				
	63A TPN MCB, Outgoing feeders - 01 No.				
	40A TPN MCB, Outgoing feeders - 02 Nos.				
	CT, PT, MCBs, Ammeter, Voltmeter with Selector Switches,indication lamps(On- Off Trip Power On -- RYB),200A alumnium bus, 35kA for 1s				
	Supply, Testing, Installation & Commisioning cost of ACDB (Indoor Type)	1	Set		
10	Manually operated Air Break Switch				
	Manually operated Air Break Switch Gang operated 3-Phase 11Kv(Outdoor)				
	Supplying/Receiving, Installation/Erection, Testing and Commissioning of Gang operated 3-Phase 11Kv,200A 40kA for 1Sec Manually operated Air Break Switch(AB Switch) with Earth Switch to be mounted on 9.0 metre steel pole. Make:- Reliable System/Sky Engineering/Transpower Switchgear Industries as per direction of E/I.	1	Set		

11	EMERGENCY POWER DISTRIBUTION BOARD (EDB).				
	Design, Fabrication, Supply, Erection,Testing and commisioning of Powder coated Aux.Power dist. Board, fabricated out of 14 guage CRCA sheet steel in cubical, compartmentallised, free standing , dust and vermin proof, (degree of protection-IP42)with reinforcement of suitable size angle iron, channel, T -iron or flats as required. Cable gland plates shall be provided on top as well as bottom of the panels. Panels shall be treated with all anti-corrosive process before painting as per specification. Panels shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)As per Specification and direction of Engineer-in-Charge. Make :- Schneider/Legrand/L&T/ Sterling as per direction of E/I.				
	Each EDB shall broadly comprise of the following equipment/components)				
	1000Amps, S.C.C 50kA for 1 Sec ACB (EDO)				
	Outgoing feeders:				
	1000Amps, S.C.C 50kA for 1 Sec ACB (EDO)				
	Indication lamps(On- Off Trip Power On -- RYB),1000 A aluminium bus , s.c.c 50 KA for 1s				
	EDBs shall cater emergency power supply to all the buildings.				
	Supply, Testing, Installation & Commisioning cost of EDB.	1	Set		
12	FEEDER PILLAR FOR STREET LIGHTS				
	Design, Fabrication, Supply, Erection,Testing and commisioning of Powder coated Distribution boards , fabricated out of 14 guage CRCA sheet steel in cubical, compartmentallised, free standing , dust and vermin proof, (degree of protection-IP42)with reinforcement of suitable size angle iron, channel, T -iron or flats as required. Cable gland plates shall be provided on top as well as bottom of the panels. Panels shall be treated with all anti-corrosive process before painting as per specification. Panels shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)As per Specification and direction of Engineer-in-Charge.Make :- Schneider/Legrand/L&T as per direction of E/I.				
	Each Feeder Pillar shall be comprising of the following equipment/components:				
	63A, TPN MCB S.C.C 10kA & 63A 4POLE RCCB Incomer 1no.				
	20A SPN MCB S.C.C 10kA Outgoing Feeders - 12 nos.				
	0-24 hrs timer switch with 3pole 415V 70A , AC3 duty powercontactor for auto switcing operation of light fittings				
	Indication lamps(On- Off Trip Power On -- RYB)				
	Supply, Testing, Installation & Commisioning cost of Feeder Pillar for Street Lights.	1	Set		

13	FEEDER PILLAR FOR PERIPHERAL LIGHTING OF BUILDINGS				
	Design, Fabrication, Supply, Erection,Testing and commisioning of Powder coated Distribution boards , fabricated out of 14 guage CRCA sheet steel in cubical, compartmentallised, free standing , dust and vermin proof, (degree of protection-IP42)with reinforcement of suitable size angle iron, channel, T -iron or flats as required. Cable gland plates shall be provided on top as well as bottom of the panels. Panels shall be treated with all anti-corrosive process before painting as per specification. Panels shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)As per Specification and direction of Engineer-in-Charge. Make :- Schneider/Legrand/L&T as per direction of E/I.				
	Each Feeder Pillar shall be comprising of the following equipment/components:				
	63A, TPN MCB S.C.C 10kA & 63A 4POLE RCCB Incomer 1no.				
	20A SPN MCB S.C.C 10kA Outgoing Feeders - 12 nos.				
	0-24 hrs timer switch with 3pole 415V 70A , AC3 duty powercontactor for auto switcing operation of light fittings				
	Indication lamps(On- Off Trip Power On -- RYB)				
	Supply, Testing, Installation & Commisioning cost of Feeder Pillar for Peripheral Lighting of Buildings.	1	Set		
14	AUXILIARY POWER DISTRIBUTION BOARD TYPE-I				
	Design, Fabrication, Supply, Erection,Testing and commisioning of Powder coated Aux.Power dist. Boards(Aux.PDB) , fabricated out of 14 guage CRCA sheet steel in cubical, compartmentallised, free standing , dust and vermin proof, (degree of protection-IP42)with reinforcement of suitable size angle iron, channel, T - iron or flats as required. Cable gland plates shall be provided on top as well as bottom of the panels. Panels shall be treated with all anti-corrosive process before painting as per specification. Panels shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)As per Specification and direction of Engineer-in-Charge. Make :- Schneider/Legrand/L&T as per direction of E/I.				
	Each PDB shall broadly comprise of the following equipment/components)				
	250A, TPN , MCCB (P-2), 35 kA for 1 sec-Incomer from normal supply				
	Outgoing feeders:				
	2 nos. 100A TPN MCCBs, 16 kA for 1 sec				
	10 nos. 63A TPN MCBs				
	Indication lamps(On- Off Trip Power On -- RYB),300 A aluminium bus , s.c.c 35 KA for 1s				
	PDBs shall cater power supply to all motorised equipment like, all 15A , 240V 3 pin power sockets, airconditoners, Heater, gyser, sump pumps,Lift services, ventilation fans,drliing machines, water pumps, welding machines etc. as per need.				
	Supply, Testing, Installation & Commisioning cost of PDB	1	Set		

15	AUXILIARY POWER DISTRIBUTION BOARD TYPE-II				
	Design, Fabrication, Supply, Erection,Testing and commisioning of Powder coated Aux.Power dist. Boards(Aux.PDB) , fabricated out of 14 guage CRCA sheet steel in cubical, compartmentallised, free standing , dust and vermin proof, (degree of protection-IP42)with reinforcement of suitable size angle iron, channel, T - iron or flats as required. Cable gland plates shall be provided on top as well as bottom of the panels. Panels shall be treated with all anti-corrosive process before painting as per specification. Panels shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)As per Specification and direction of Engineer-in-Charge.Make :- Schneider/Legrand/L&T as per direction of E/I.				
	Each PDB shall broadly comprise of the following equipment/components)				
	250A, TPN , MCCB (P-2), 35 kA for 1 sec-Incomer from normal supply				
	Outgoing feeders:				
	1 no. 160A TPN MCCBs, 35 kA for 1 sec				
	2 nos. 100A TPN MCCBs, 16 kA for 1 sec				
	10 nos. 63A TPN MCBs				
	Indication lamps(On- Off Trip Power On -- RYB),200 A aluminium bus , s.c.c 35 KA for 1s				
	PDBs shall cater power supply to all motorised equipment like, all 15A , 240V 3 pin power sockets, airconditoners, Heater, gyser, sump pumps,Lift services, ventilation fans,drliing machines, water pumps, welding machines etc. as per need.				
	Supply, Testing, Installation & Commisioning cost of Aux PDB Type-II	1	Set		
16	LIGHTING POWER DISTRIBUTION BOARD				
	Design, Fabrication, Supply, Erection,Testing and commisioning of Powder coated Lighting dist. Boards(LDB) , fabricated out of 14 guage CRCA sheet steel in cubical, compartmentallised, free standing , dust and vermin proof, (degree of protection-IP42)with reinforcement of suitable size angle iron, channel, T - iron or flats as required. Cable gland plates shall be provided on top as well as bottom of the panels. Panels shall be treated with all anti-corrosive process before painting as per specification. Panels shall be suitable for 415V, 3-Phase, Four wire, 50 Hz supply complete with earth bus and lifting hooks as required in case of large panels.Approval shall be taken for each panel before fabrication. (All hardwares like nuts and bolts used shall be Galvanized and Zinc passivated)As per Specification and direction of Engineer-in-Charge.Make :- Schneider/Legrand/L&T as per direction of E/I.				
	Each PDB shall broadly comprise of the following equipment/components)				
	100A, TPN , MCCB (P-2), 16 kA for 1 sec-Incomer				
	Outgoing feeders:				
	12 nos. 40A TPN MCBs				
	Indication lamps(On- Off Trip Power On -- RYB),200 A aluminium bus , s.c.c 35 KA for 1s				
	LDBs shall cater power supply to 6-Way & 4-Way TPN Boards for lighting circuit.				
	Supply, Testing, Installation & Commisioning cost of LDB	1	Set		

विशेष शर्ते–

- यह कोटेशन सिर्फ दर निर्धारण हेतु आमंत्रित किया गया है।
- कोटेशनदाताओं को अपना दर (सभी करों, GST एवं ढुलाई व्यय के साथ) अंक एवं अक्षरों में उद्धृत करना होगा।
- विशेष सूचना के लिए सूचनापट्ट या वेबसाइट www.prdbihar.gov.in एवं www.bseidc.in देखें अथवा अधोहस्ताक्षरी के कार्यालय में कार्यावधि में संपर्क किया जा सकता है।

8/5/2023

अधीक्षण अभियंता
BSEIDC, पटना।