# DEENDAYAL PORT AUTHORITY

An ISO 9001:2008 & ISO 14001:2004 Certified Port

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Office of the Executive Engineer (E) Ground Floor, P & C Building, New Kandla – Kachchh, Pin.370210-Gujarat.

No.: EL/AC/\_\_\_\_

Date: 22/12/2023

## **EXPRESSION OF INTEREST**

(This Notice is issued only to elicit Expression of Interest from the parties interested in the work and does not constitute any binding commitment from the Deendayal Port Authority to proceed with the work or invite any or all the parties in the subsequent bidding process. The Open Tenders will be issued subsequently)

Τo,

Sub: "EOI for Sprinkling system inside Cargo Jetty area for coal dust suppression in Coal Yard. AMC for period of five years. – Electrical Part

Sir,

You are requested to submit Expression of Interest for "Sprinkling system inside Cargo Jetty area for coal dust suppression in Coal Yard. AMC for period of five year. – Electrical Part." as per schedule-B, Scope of Work and Terms & Conditions.

The Expression of Interest should reach to this office on or before 29/12/2023.

Yours faithfully

Sd/-Executive Engineer (E) Deendayal Port Authority

## <u>Schedule-B</u>

Sr. No.	Description	Qty	Unit	Rate	Amount
1	LT Power Cable laying				
a)	<ul> <li>Supply , laying of heavy duty medium voltage cables,1100 volts grade, Laying of cable in side the 200 mm. dia HDPE pipe (excluding laying of pipe) of will be below ground as per the direction of the site In charge. Minor cleanness if required must be scope of electrical contractor. (Clamping is the scope of electrical erection contractor where it is required) as per specification and IS 1554 part II,7098 XLPE insulated , PVC inner and outer sheathed , stranded AL / CU conductor unless or otherwise specified. The cable shall be laid as per the specifications. The cable shall be laid as per the specifications. The cable shall be laid as per the specifications, pulley etc. to pull the cable in pulling pit is included in scope of work. The scope shall also include supply, fixing , connection , testing and commissioning of double compression brass cable glands with hood and crimping type Bimetallic lugs / sockets with necessary tools &amp; equipment's as specified in specification s &amp; IS. The gland and lugs / sockets shall be suitable for cable size and type mentioned above the job includes if necessary supply and the unit shall include</li> <li>1) Connection of cable. Cable tagging is required at the both end of termination as weel as at every manhole.</li> <li>2) Supply and fixing of cable G I clamps ( with GI screw.) , Nylon tie, Brackets, supports, route markers etc. where ever required to fix the cables safely. Route markers to be provided at every 30m and at each diversions.</li> <li>3) Earthing the glands and armouring with earthing clamp and jumper and also connecting to common earth bar.</li> <li>4) Lifting of chamber cover, and close chamber cover at</li> </ul>				
		<u> </u>	1		

	the respective place after cable laying.			
	<ol> <li>Testing of insulation and continuity of cable and submission of reports to the clients.</li> </ol>			
	6) Excavated & laying in cable in under ground.			
	<ol> <li>Shifting of cable from site store to place of installation.</li> </ol>			
	a) SITC of 3.5C x 300 sq. mmm. AL. XLPE Cable	973	Meter	
2	SITC of termination of LT Power cables using Comet make double compression glands, ferrules, gland hoods & Dowell's make double compression IP-65 type lugs. All cables to be lugged irrespective of multi strand/Single strand (hoods are considered for supply).			
	a) SITC of 4 C x 10 Sq.mm AL.XLPE	10	Nos.	
	b) SITC of 4 C x 10 Sq.mm AL.XLPE	3	Nos.	
3	SITC of 1.1kV , XLPE, armoured power cable straight thorough joint including joiting kit, jointing materials and all sundry materials to complete with testing & commissioning (Raychem make) a) SITC of 4 C x 10 Sq.mm AL. XLPE	2	Nos.	
	PLUG SOCKETS FOR EQUIPEMENTS			
4	<ul> <li>a) SITC of 240 V 16 A industrial type metalclad socket with 16 A DP MCB with PVC back box suitable for modular plate and other necessary accessories to complete the installation.</li> </ul>	2	Nos.	
	INTERNAL WIRING			
5	Supply, installation, connection, testing & commissioning of following outlet points as per specification & IS. The unit rate for the point shall consist of the circuit wiring from LDB or switch board to outlet point through MCB / switch as required & including the outlet point switch connector &			

termina be don duty , with ne pipes a conduc suitable plated	s. A point shall include in addition to the final ation at outlet points. All the wiring, outlet points shall be in open wiring manner with ISI approved medium rigid FR PVC, ISI conduit of minimum 25 mm. dia., ecessary bends, Tees, CLAMPS, BOLTS/screws, chains, and deep junction boxes using 650 V FRLS copper ctor wire, industrial type, heavy duty switches with e plate, PVC back box with brass chromium / cadmium machine screws etc. ze for lighting circuit			
	ction of cable. Cable tagging is required at the both termination as well as at every manhole			
1)	Lighting circuit = 2 x 2.5 mm2 ( P+ N) , 1 x 1.5 mm2 ( E)			
2)	Power circuit = 2x 4.0 sq.mm. ( P+N), 1x2.5 sq.mm. ( E)			
3)	Avg. circuit length from LDB to switch board 20 mtr.			
4)	Avg. circuit length from switch board to primary point 6 mtr.			
5)	Avg. circuit length from primary point to secondary point 3 mtr.			
6)	Making of zari in wall using only electric cutter and finishing the surface as it was.			
7)	earthing of fitting.			
8)	Electrical connection to the fixture from the out let point / ceiling rose.			
9)	Supply and fixing of supporting frame, hardware and n/c tools and tackles etc. for Exhaust fan.			
a)	Supply, laying, testing and commissioning of the 3c x 2.5 sqm.mm. cu. XLPE, FRLS cable along with end termination, laid in the cable tray & along with structural member / wall / beam / 25 mm dia. PVC conduit , then to be laid duly clamped as per requirement, cable tray & PVC conduit cost included.	410	Meter	

	<ul> <li>b) SITC of Raychem make or equivalent Cable End termination for 3c x 2.5 sq. mm. Cu XLPE , FRLS cable with Terminal Protector Kit jointing materials and all sundry materials complete with testing and commissioning.</li> <li>c) Supply, Installation, Testing and Commissioning of PVC junction boxes of 100 x 100 x 100 mm size to be installed near each lighting fixture . The Eight-way connector strip for the suitable size shall be installed</li> </ul>	22	Nos.	
	in the junction box. The rate should include the box, connection strip and installation of the same near all the fixtures.	10	Nos.	
6	LIGHT FIXTURES, FAN EXHAUST FAN Cable tray			
	a) Supply and installation of FRP cable tray of 600mm wide x 100 mm height x 6 mm thickness	10	Meter	
7	Supply, installation, testing and commissioning of Cables : 1.1 KV Grade stranded Cu. / AI. Conductor, PVC insulated Armored Cable including cable glands, lugs etc. ( Cable to be laid in HDPE pipe excluding cost of pipe ) ( a) 4 C x 6 Sq.mm. Copper armoured cable.	349	Meter	
8	Supply, installation, testing and commissioning of Cables : 1.1			
	KV Grade stranded Cu. / Al. Conductor, PVC insulated			
	Armored Cable including cable glands, lugs etc. ( Cable to be laid in HDPE pipe excluding cost of pipe ) ( a) 4 C x 4 Sq.mm. Copper armored cable .	1190	Meter	
9	Supply, installation, testing and commissioning of Cables: 1.1			
	KV Grade stranded Cu. / AI. Conductor, PVC insulated Armored Cable including cable glands, lugs etc. ( Cable to be			
	laid in HDPE pipe excluding cost of pipe ) ( a) 4 C x 1.5 Sq.mm. Copper armored cable .	5410	Meter	
10	Supply, installation, testing and commissioning of Cables : 1.1			
	KV Grade stranded Cu. / AI. Conductor, PVC insulated Armored Cable including cable glands, lugs etc. ( Cable to be			
	laid in HDPE pipe excluding cost of pipe $(a) 4 C \times 1.0 $ Sq.mm.	11035	Meter	
	Shielded Copper control cable .			
11	Supply, installation, testing and commissioning of Cables: 1.1			
	KV Grade stranded Cu. / Al. Conductor, PVC insulated			
	Armored Cable including cable glands, lugs etc. ( Cable to be laid in HDPE pipe excluding cost of pipe ) ( a) 3.5 C x 50 Sq.mm. Copper flexible cable .	120	Meter	

12	Supply, installation, testing and commissioning of Cables: 1.1 KV Grade stranded Cu. / Al. Conductor, PVC insulated Armored Cable including cable glands, lugs etc. ( Cable to be				
	laid in HDPE pipe excluding cost of pipe ) ( a) 3.5 C x 10	40	Meter		
	Sq.mm. Copper flexible cable .				
		Тс	otal Am	ount in INR	

(In words Rupees \_\_\_\_\_\_ only)

(NOTE: The rates should be inclusive of all taxes, duties, fees, cess etc and all incidental charges; but exclusive of GST).

Signature & Seal of Contractor

Sd/-Executive Engineer (E) Deendayal Port Authority

### SPECIAL CONDITIONS FOR ELECTRICAL PART IN CIVIL WORK

- **1.** In the event of dimension figures upon a drawing differing from those obtained by measuring drawings shall be referred to the Chief Engineer, whose decision shall be final and binding upon the Contractor.
- **2.** For successfully Execute the work, the firm shall depute or nominate their Engineer or project-In-Charge or competent person, who deal the Electrical Part of the project to Engineer-In-Charge.
- **3.** While carrying out the work of electrical nature, the Contractor shall adhere to the provisions of the Indian Electricity Rules, 1956 and as amended from time to time and shall not violate any regulations which he will be solely responsible.
- **4.** The work shall be programmed in such a way that the electric supply to the existing installations is not disturbed to the extent possible keeping in view of the work of cutting existing cables, making straight joints and terminating cable ends in the feeder pillar, switchgear etc. shall be carried out within the shortest possible shut down periods to instruction.
- **5.** Armoring of the PVC-A-PVC / XLPE armored cables shall be effectively earthed at the termination glands and connecting to the nearest earth point. The tail end shall be taped with PVC adhesive tape appropriate colour.
- **6.** The cable to be supplied by the Contractor shall be in standard drum length and straight joint shall be avoided as far as possible. Incase same cannot be avoided the Contractor shall supply the requisite number of straight joints complete with jointing materials and accessories shall carry out the jointing work at their cost.

- **7.** Necessary marking and lettering giving details of the circuits, cables etc shall be carried out on the pedestal and LT panels as per the directions given.
- **8.** Caution board vitreous enameled written in three languages, one being the regional language, shall be fixed or displayed to indicate danger and supply pressure according to the Indian Electricity Rules 1956 wherever the supply is at 440 Volts and above.
- **9.** Necessary cable route indicators and cable joint indicators shall provide.
- **10.** The work shall be carried out in accordance with the best standards of workmanship and to the entire satisfaction of the Engineer-in-Charge.
- **11.** All wiring, shall be concealed & LED fittings will be surface mounted Bulk Head, hence at the time of CIVIL work, firm shall be planed accordingly & continues touch with EIC for Concealed wiring / Points/ sub Ckt./location of LED fitting, LPP/Meter/DB, otherwise firm shall be responsible for any untoward situation & no claim what-so-ever shall be entertained
- **12.** Queries about the Technical Data The Engineer-in-Charge will clarify queries on the Technical Data.
- **13.** Instructions

The contractor shall follow all instructions of the Engineer in Charge or his nominee which comply with applicable laws where the site is located.

**14.** Safety

The Contractor shall be responsible for the safety of all activities on the Site.

- **15.** Quality Control
  - Identification of Defects

The Engineer-in-Charge or his nominee shall check the work carried out by Contractor and notify the Defects found if any. The Engineer-in-Charge or his nominee may instruct the Contractor to rectify the Defect.

Approvals:

The Engineer-in-Charge shall give specific approval in writing within 7 Days to Contractor after written submission regarding Makes of Material to be used for the Contract and Drawings, if any to be furnished by the Contractor to Engineerin-Charge for approval. Any corrections to be suggested by Engineer-in-Charge in drawings, the days taken for rectification in drawings shall be in account of the Contractor.

- **16.** In case of manufacturer/ Authorized dealer/ civil contractor who do not have valid electrical contractor license, they have to provide, their employee having electrical supervisory certificate while carrying out electrical works or The whole electric work carried out by the Sub Contractor should have electric license & having experience of the work carried out in Government / PSU or any industries, in this case firm shall take prior approval from Chief Mechanical Engineer, Deendayal Port Trust
- **17.** The contractor shall not deposit any materials at such a place that may cause inconvenience to the public or staff or nearby offices.

**18.** The Contractor shall execute the work in such a way that not to cause inconvenience to the public or staff or nearby offices and not to cause hindrance to traffic. Necessary barricading shall be done by the contractor at his own cost if required.

- **19.** All tools, plants, scaffolding ladder etc. and other machinery etc. required temporary for the purpose of execution of work will have to be arranged by the contractor at his own cost and storing of such tools, plants etc. will have to be made by him.
- **20.** All the work shall be carried out to the entire satisfaction of Engineer in Charge.

### Signature & Seal of Contractor

S/d-Executive Engineer (E) Deendayal Port Authority

	Approved Make List of Electrical Items				
Sr. No.	Description	Recommended Makes			
1	HV VCB	SIEMENS/CROMPTON GREAVES/ABB/Schneider			
1(a)	HV Gas Insulated Breakers	SIEMENS /Schneider/ABB			
2	POWER TRANSFORMERS	VOLTAMP/CROMPTON GREAVES /BHARAT BIJLEE/ BHEL/ SIEMENS/ABB/ Schneider/T&R			
3	DISTRIBUTION TRANSFORMERS	EMCO/KIRLOSKAR/PATSON/VOLTA MP/ABB/Schneider/T&R			
4	RESIN CAST TRANSFORMERS				
	A) RESIN CAST IMPREGNATED	VOLTAMP / KIRLOSKAR / EMCO			
	B) DRY CAST	VOLTAMP/KIRLOSKAR/EMCO			
5	HT XLPE CABLES	POLYCAB/ TORRENT/ RPG ASIAN/ GLOSTER/ UNISTAR			
6	LT XLPE CABLES	POLYCAB/TORRENT/RPG ASIAN/ RALLISON/PRIMECAB/ HAVELLS/ UNISTAR/AVOCAB/ALLCAB/ADCAB			

7	LT ACB	SIEMENS/L&T/SCHNEIDER/C&S
8	PROTECTION RELAYS	AREVA/L&T/SIEMENS/ABB/C&S
9	LT PANEL	CPRI APPROVED
10	CHANGE OVER SWITCH	SIEMENS/L&T/ABB/C&S/SCHNIDER/ LEGRAND / INDOASIAN
11	SFU FOR MAIN LT DISTRIBUTION PANELS	SIEMENS/L&T/ABB/C&S
12	SFU FOR DISTRIBUTION PANELS & FEEDER PILLERS	SIEMENS/L&T/ABB/C&S/ SCHNEIDER/ LEGRAND/ INDOASIAN/HAVELLS
13	MCCB FOR MAIN LT DISTRIBUTION PANELS	SIEMENS/L&T/ABB
14	MCCB FOR DISTRIBUTION PANELS AND FEEDER PILLERS	SIEMENS/L&T/ABB/C&S/ SCHNIDER/ LEGRAND/ INDOASIAN/HAVELLS
15	MCB/ELCB/RCCB/ RCCBO FOR MAIN LT DISTRIBUTION PANELS	SIEMENS/HAGER L&T/ABB
16	MCB FOR DISTRIBUTION PANELS AND FEEDER PILLERS	SIEMENS/L&T/ABB/C&S/ SCHNEIDER/ LEGRAND/ INDOASIAN/ HAVELLS/ STANDARD
17	MCB DISTRIBUTION BOARD	STANDARD / HENSEL/LEGRAND / INDOASIAN / HAVELLS
18	MULTI FUNCTION DIGITAL METER FOR MAIN LT DISTRIBUTION PANELS/DIGITAL KWH METERS	
19	ANALOG VOLT/AMPARE METER FOR DISTRIBUTION PANELS AND FEEDER PILLERS	
20	SLECTOR SWITCH FOR VOLTMETER/AMPARE METER	L&T/SIEMENS/C&S
21	POWER CONTACTOR & OVER LOAD RELAYS	L&T/SIEMENS/ABB
22	QUARTZ TIME CLOCK SWITCH	L&T/INDOASIAN/SIEMENS
23	PVC WIRE WITH COPPER CONDUCTOR	RRKABEL/KEI/POLYCAB/MILEX/GUJCA B/ STANDARD/ FINOLEX/ ANCHOR
24	FLUSH TYPE SWITCHES, SOCKETS, HOLDERS AND CEILING ROSES &	

	ELECTRONIC REGULATORS	
25	DOOR BELLS/CALL BELLS	ANCHOR/LEGEND/MK/NORTHWEST
26	MODULAR SWITCHES, SOCKETS, PLATES & BOXES	ANCHOR / MK / NORTHWEST / LEGRAND /HAVELLS/ INDOASIAN/ SIEMENS
27	PVC CONDUIT/OVAL CONDUIT & CASSING CAPPING AND ACCESSORIES	PRECISION/VULCAN/FINOLEX/ GARWARE/ RESTOPLAST/ SWASTIK/ BPI
28	GLS LAMPS & FLUORESCENT LAMPS	PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE
29	HPSV, HPMV & METAL HELIDE LAMPS	PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE
30	IGNITORS FOR HPSV, METAL HELIDE LAMPS	PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE
31	LUMINARIES	PHILIPS/BAJAJ/WIPRO/CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE
31a	LED Luminaries	Philips /Bajaj/Wipro/CG/Surya/Pyrotech/Sys ka/Nessa having surge Protection ≥10KV for fittings & internal Surge protection for Driver of≥4KV, LED Chip only OSRAM/CREE/Philips Lumileds/Citizen/Nicia with LM-79,80 CERTIFICATION
32	CEILING FANS	BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC
33	WALL MOUNTING FANS	BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC
34	EXHUAST FANS	BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC
35	HEAVY DUTY INDUSTRIAL WALL MOUNTING FANS	BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC
36	WATER COOLER	VOLTAS/SHRIRAM USHA/BLUE STAR
37	AIR CONDITIONERS	VOLTAS/CARRIER/BLUESTAR/USHA/ HITACHI/LG/ SAMSUNG/ONIDA

38	REFRIGERATORS	VOLTAS/CARRIER/BLUESTAR/USHA/ HITACHI/LG/ SAMSUNG/WHIRLPOOL
39	VOLTAGE STABILIZER	VEELINE / CAPRI
40	INVERTERS	SUKAM / MICROTEK
41	D.G. SETS (a) ENGINE (b) ALTERNATOR	CUMMINS/GREAVES/KIRLOSKAR/ CATERPILLAR/ASHOK EYLAND/VOLVO STAMFORD/CROMPTON GREAVES /JYOTI/ KIRLOSKAR ELECTRIC
42	ELECTRIC MOTOR	ALSTOM/CROMPTON GREAVES /SIEMENS/ KIRLOSKAR/ABB
43	WATER PUMPS	SWASTIK / KSB
44	WATER GEYSER	BAJAJ/USHA / CROMPTON GREAVES / SPHEREHOT / RACOLD
45	LUGS & CABLE GLANDS	DOWELLS / JAINSON / BRACO

S/d-

Signature & Seal of Contractor

Executive Engineer (E) Deendayal Port Authority