DEENDAYAL PORT AUTHORITY
ISO 9001:2008 | ISO 14001 | ISPS Compliant Port

Office of Executive Engineer (Electrical), Ground Floor, Nirman Building, New Kandla, Kutch, Pin Code 370210.

No.: EL/WK/2859 Date: 10/03/2025

EXPRESSION OF INTEREST [EOI]

Name of Work: "Design, Supply, Installation, Testing & Commissioning of Hybrid Solar Street Light (LED Base) from KK Road to 8th Oil Jetty Substation, Kandla"

(This EOI is issued 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.)

Executive Engineer (Electrical), DPA invites Expression of Interest for the work of "Design, Supply, Installation, Testing & Commissioning of Hybrid Solar Street Light (LED Base) from KK Road to 8th Oil Jetty Substation, Kandla" from the reputed firms from those who have executed similar work in Government/public sectors and other leading private organizations. The Expression of Interest (EOI) documents containing details of Scope of Work and Technical Specifications are enclosed herewith.

The interested firms are requested to submit their expression of interest for the said work in BOQ format as enclosed at Annexure I. The completed EOI (Expression of Interest) shall be submitted to the office of the undersigned on or before 17/03/2025. A soft copy of EOI is also acceptable through e-mail Id anantrao.kumthekar@deendayalport.gov.in & Deepak.hazra@deendayalport.gov.in .

Executive Engineer (E)

Deendayal Port Authority

Name of Work: Design, Supply, Installation, Testing & Commissioning of Hybrid Solar Street Light (LED Base) from KK Road to 8th Oil Jetty Substation, Kandla.

Annexure-I

Sr. No.	Description	Qty.	Unit	Rate	Amount
1	Supply, Installation, Testing & Commissioning of 7-meter height dual arm octagonal type Pole & 40 W LED Street Lights as per Technical Specification No. 1				
(A)	7-meter height dual arm octagonal type Pole	200	No.		
(B)	40W LED Street light as per design (cool white)	400	No.		
2	Supply, Installation, Testing & Commissioning of PV Solar Panel of 545 W & supporting accessories as per the Technical Specification No. 2	1	Set		
3	Supply, Installation, Testing & Commissioning of battery bank of 245 kwh as per Technical Specification No. 3	1	Set		
4	Supply, Installation, Testing & Commissioning of on grid Hybrid Inverter as per Technical Specification No. 4	1	No.		
5	Supply, Installation, Testing & Commissioning of on 20 KVA voltage Stabilizer as per Technical Specification No. 5	1	No.		
6	Supply, Installation, Testing & Commissioning of Power & Control cables for successfully commissioning of above solar system as per Technical Specification No. 5				
(A)	70 Sq. mm., 4 core, Aluminum Armored cable	1500	Mtr.		
(B)	16 Sq. mm., 4 core, Aluminum Armored cable	5000	Mtr.		
Total					

(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 Firm

Executive Engineer (E)

Deendayal Port Authority

SCOPE OF WORK & TECHNICAL SPECIFICATION

Deendayal Port Authority (DPA) is one of the Major Port in India. The Specification is intended to cover the work for Design, Supply, Installation, Testing & Commissioning of Solar Street Light (LED Base) from KK Road to 8th Oil Jetty Substation at 8th Oil Jetty, Kandla. The work shall be executed to the satisfaction of the Engineer in-Charge. The contractor shall arrange all types of tools, tackles, temporary power supply at his own cost for installation, testing & commissioning of the work.

TECHNICAL SPECIFICATION

Technical Specification No. 1:

(A)7Mtr Pole

Sr. .No:	DESCRIPTION:	DETAILS:
1	General Specifications:	Supply of 7 Mtr. Hot Dip Galvanized Street Light Octagonal Pole with Foundation Type Base Plate & Foundation Bolts (Dimensions for pole as Top Diameter 70 mm, Bottom Diameter 130 mm, Section Length- 7000 mm., Thickness-3 mm, Foundation Type Base Plate (220 X 220 X 12 mm.), Foundation Bolts (M20 X 600 mm./4 Nos). with dual type arm bracket as per design, suitable for 40 W LED street light fitting.
2	Pole Shaft:	The pole shaft shall be made from sheet steel confirming to BSEN 10025. The pole shaft shall have octagonal cross section and shall be continuously tapered with single longitudinal welding. There shall not be any circumferential welding. All octagonal pole shafts shall be provided with the rigid flange plate of suitable thickness as per design with latest IS standard with provision for fixing 4 foundation bolts. This base plate shall be fillet welded to the pole shaft at two locations i.e. from inside and outside apart from same gusset shall also be provided.
3	Dimension:	Pole Top Diameter 70 mm., Bottom Diameter 130 mm, Section Length- 7000 mm., Thickness-3 mm., Foundation Type Base Plate (220 X 220 X 12 mm.), Foundation Bolts (M20 X 600 mm./ 4 Nos.)
4	Wind Speed	50 m/s or 180 Km/hr
5	Material:	Octagonal Poles -Steel Grade BSEN 10025 - S355J0 or Equivalent Base Plate Fe 410 conforming to IS : 226 / IS : 2062
6	Pole Sections:	The Octagonal Poles shall be in single section. There shall not be any circumferential weld joint.
7	Galvanization:	The poles shall be hot dip galvanized as per relevant Indian standards with average coating thickness of minimum 85 micron and above.
8	Fixing Type:	The Octagonal Poles shall be suitable for bolting on a foundation with a set of four foundation bolts for greater rigidity. Bracket for fixing luminaire of 40 W and above as per Design: The brackets shall be made of specified size G.I heavy duty pipe with minimum 1000 mm long and 42 mm. dia. with necessary holding brackets or as per design, hold fasts etc. suitable for LED light mounting.

(B) 40W Light

Sr. No	Description	Specified
1	Wattage	40W ± 5%
2	Operational voltage/ Wattage	100 Volts to 300 Volts. (The wattages of Luminaries is as mentioned)
3	Operational frequency	50 Hz.
4	LED type	High Power Surface Mounted Device LEDs. LED chip Size shall be 5 mm. X 5 mm. (5050)
5	LED wattage	Between 1 to 3 Watt each
6	LED Lifetime:	≥ L70B10, 50000H
7	LED Make	Nichia / Osram / Philips / Cree / Seoul / Bridgelux/Citizen
8	Luminary System Lumen/watt	More than 150 Lumen/Watt
9	SDCM	< 5
10	MCPCB	MCPCB of higher thermal conductivity Preferably ≥1 deg K/W
11	Junction Temperature	Less than 85°C
12	CRI	Minimum 70
13	Colour Temperature	5500K to 6500K
14	Power Factor	≥ 0.97
15	THD	<10%
16	Optics	Factory fitted optics cover/Lens, optic lenses suitable for road lighting, single module having Suitable beam angle to achieve desired LUX level.
17	Optical Cover / lens material	PC/PMMA
18	LED Optics Cover/ Lens:	T1/T2/T3 Batwing pattern
19	Working Temperature:	-10˚C to 50˚C
20	Housing Material	High pressure die cast Aluminum ADC12
21	Housing Finish	Powder Coating (Avg Coating thickness ≥ 80 micron)
22	Dimensions of fixture	
23	Weight of fixture	
24	Ingress Protection	IP - 66
25	Light ID	44 mm. – 50 mm.
26	Gasket	Silicon rubber
27	Control gear (Power Driver)	Potted & Constant current
28		shall withstand Over voltage of 320 V for 48 Hrs. Over voltage 380 V for 1 Hr.
29		Over voltage of 440 volts for 8 Hrs. (48 Hrs. preferred) and suitable short circuit current protection
30		Auto shut down at 300V±30V & Auto restart
31		BIS Approved makes As per IS 15885 : Part 2 : Sec 13
32	Driver efficiency	>88%
33	Electrical Protection	a) External surge protection up to 10 KV.
34		b) Internal surge protection 6 KV.
35		c) Short circuit protection.
36		d) Over voltage above 270 Volts and Under Voltage protection below 140 Volts,
37		e) Reverse polarity protection.

38		f) IR Test with 500 V Megger (more than 2 ohm)
39	Impact resistance	(IK 08)
40	Dia lux Design parameter	Pole Distance - 25.000 m
41		Mounting Height - 7.000 m
42		Pole Arrangement - On Median
43		median Width - 1
44		Road Width - 8 m
45		Boom Angle - 5° - 10.0 °
46		Boom Length - 1.000 m
47		Light loss factor / maintenance factor - 0.80
48		Min Grid Point - 128 X 128 Points
49		Average Lux - ≥ 18
50		Emin [lx] - ≥ 6.5
51		Uniformity u0 - ≥ 0.35
52		Emin / Emax - ≥ 0.15

Technical Specification No. 2:

Solar Panels
Supply, installation, Testing & commissioning of minimum 545 W Hybrid Solar panels with Mono Perc or latest technology suitable for 400 Nos. LED street light to run for 10-12 Hours.
IS/IES 61730 (Part I): 2004 & IS/IEC 61730 (Part II) : 2004 UL Certified IEC 61701 & IEC 61853-1
100% EL inspection ensure modules are defect free Application class C,
Safety class II/ IEC 61215:2005 BIS/IS 14286:2010 Anti - reflective surface
to reduce power loss

25 years warranty of output with minimum 10-year warranty of product ALLM Approved

ARRAY STRUCTURE:
Material of Mounting Structure: Hot dipped Galvanized MS mounting Structure.
Angle of inclination as per the site conditions to take maximum insolation for each mounting structure.
Material of mounting structure for mounting the modules/panels/arrays: Structural Steel, Grade: E300 (as per IS 2062: 2011 latest).
Galvanization of the mounting structure: As per IS 4759 latest
Structural material shall be corrosion resistant and electrolytic compatible: Module frame, fasteners, nuts and bolts.
Material of fasteners: Steel as per IS 1367 (Part 1) 2002 latest. Structures Design shall allow easy replacement of any module.
Civil Structure shall be as per the load bearing capacity of the roof and the suitable structures based on the quality of roof.
Minimum clearance of the structure from the roof level: 1 meter.

JUNCTION BOX:
Junction Boxes shall be provided in the PV array for termination of connecting cables. Junction Box on PV Module shall be sealed type.
Material of Junction Box shall be Fiber Reinforced Plastic (FRP). Ingress Protection Class: IP 65.
Termination of Wire/Cable shall be through cable lugs.
Input & Output Termination shall be through single or double compression cable glands.
Copper bus-bars/terminal blocks shall be housed in the Junction Box with suitable termination threads.
Provision of Earthing System shall be provided as per design requirement. Surge Protection Device shall be provided for each Junction Box.

WIND LOAD:
The mounting structure shall be designed to withstand the wind speed of 150 Km per Hour.

DC DISTRIBUTION BOARD:
DC Distribution Panel to receive the DC output from the Array field with Surge Arrestors.
Ingress Protection Class: IP - 65.
Bus-bar: Copper Bus-bar of size as per rating of Inverter.
Circuit Breaker for input size (DC side) for Inverter: MCB of suitable rating.

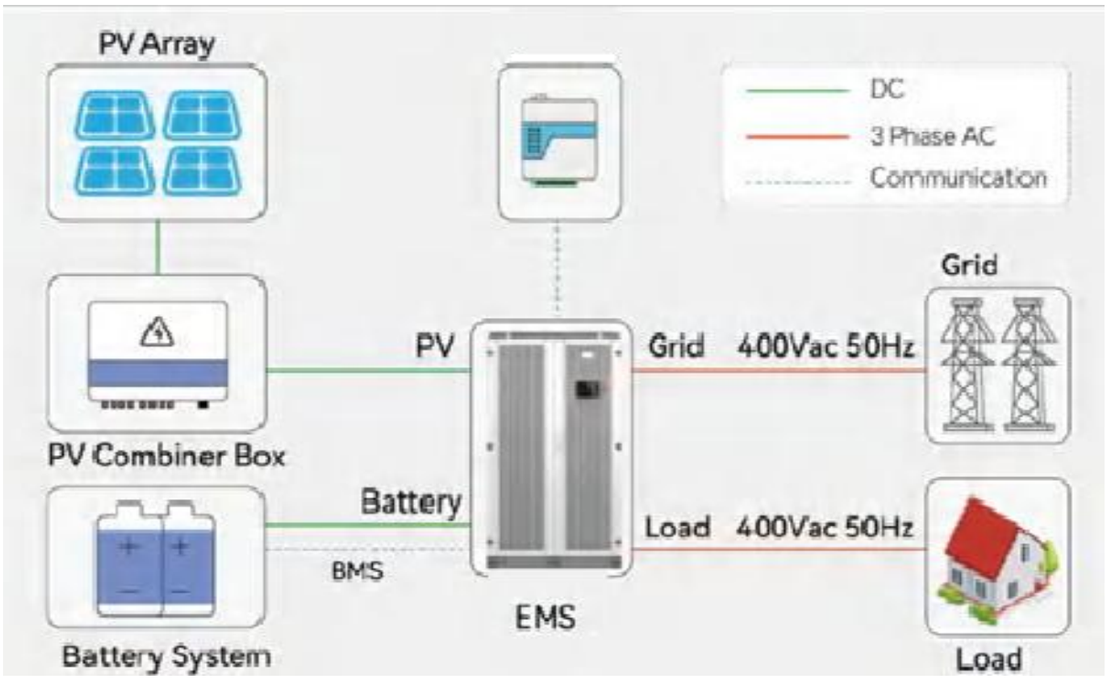
AC DISTRIBUTION BOARD:
AC Distribution Panel Board for controlling AC power from PCU/Inverter: 3 Phase 415 Volt ± 10%, 50 Hz. ± 3 Hz.
Panel Construction: Wall/Floor mounted, air insulated, cubical type with change-over switch, as per design requirement.
Ingress Protection Class: IP 65
All switches and the circuit breakers, connectors shall conform to IS 60947 Part I, II & III.
Circuit Breaker for Output side (AC side) for Inverter: MCB of suitable rating.

CABLE FOR PV:
ISI marked connecting cables according to Inverter rating for each system: PV Module to Inverter DC.
Cable for Input: Minimum 1C X 6 Sq. mm. Copper Cable as per IS 694: 2010 Cable length for PV Module to Inverter DC: As per site requirement.

Technical Specification No. 3:

PCU and Battery storage System (BESS)
Supply, installation, Testing & commissioning of BESS – Power Conditioning unit with 245 KWH of LiFEPO4 batteries suitable to handle 16 KW of load with 10-12 hours of back up.
All the Cells used in batteries must be LIFEPO4 type with ISI marked.
PCU should be able to draw power from both Solar and Grid and it should have ability to set priority.

Reference drawing



Technical Specification No. 4:

Sr. No	Description	Specification
1	**Battery Input Data**	
2	Battery Type	Lithium-ion
3	Battery Voltage Range (V)	160-800
4	Max. Charging Current (A)	Self-adaption to BMS
5	Max. Discharging Current (A)	50+50
6	Charging Strategy for Li-ion Battery	50+50
7	Number of Battery Input	2
8	**PV String Input Data**	
9	Max. PV Access Power (W)	78000
10	Max. PV Input Power (W)	78000
11	Max. PV Input Voltage (V)	1000
12	Start-up Voltage (V)	180
13	MPPT Voltage Range (V)	150-850
14	Rated PV Input Voltage (V)	600
15	Max. Operating PV Input Current (A)	36+36+36+36
16	Max. Input Short-Circuit Current (A)	55+55+55+55
17	No. of MPP Trackers/ No. of Strings MPP Tracker	4/2+2+2+2
18	**AC Input/Output Data**	
19	Rated AC Input/Output Active Power (W)	60000
20	Max. AC Input/Output Apparent Power (VA)	66000
21	Rated AC Input/Output Current (A)	91.1/87.8
22	Max. AC Input/Output Current (A)	100.2/96.6
23	Max. Continuous AC Passthrough (grid to load) (A)	200
24	Peak Power (off-grid) (W)	1.5 times of rated power, 10s
25	Power Factor Adjustment Range	0.8 leading to 0.8 lagging
26	Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un
27	Rated Input/Output Grid Frequency/Range (Hz)	50/45-55, 60/55-65
28	Grid Connection Form	3L+N+PE
29	Total Current Harmonic Distortion THDi	<3% (of nominal power)
30	DC Injection Current	<0.5% In
31	**Efficiency**	
32	Max. Efficiency	97.60%
33	Euro Efficiency	97.00%
34	MPPT Efficiency	>99%
35	**Equipment Protection**	

36	Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level
37	Surge Protection Level	TYPE II(DC), TYPE II(AC)
38	**Interface**	
39	Communication Interface	RS485/RS232/CAN
40	Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN (optional)
41	**General Data**	
42	Operating Temperature Range (℃)	-40 to +60℃, >45℃ Derating
43	Permissible Ambient Humidity	0-100%
44	Permissible Altitude	2000m
45	Noise (dB)	≤65
46	Ingress Protection (IP) Rating	IP65
47	Inverter Topology	Non-Isolated
48	Over Voltage Category	OVC II(DC), OVC III(AC)
49	Cabinet Size (WxHxD mm)	527 X 894 X 294 (Excluding Connectors and Brackets)
50	Weight (kg)	80
51	Type of Cooling	Intelligent Air Cooling
52	Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy
53	Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richt Linie R25, G99, VDE-AR-N 4105
54	Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

Technical Specification No. 5:

Rated power in VA - 20 kVA
Minimum insulating resistance - 5 MOhm
Maximum [In] rated current- 30.4 A
Efficiency - 92 %

Input voltage limits - 230...430 V
Optional feature - Bypass Cooling fan
Protection type - Overvoltage for output
- Undervoltage protection optional for input Undervoltage protection optional for output Overload protection optional
- Phase failure optional
- Temperature rise protection optional Time delay optional
- Inrush surge protection optional
- Signaling function LED

Output voltage - 380 V AC +/- 4 %
Network frequency - 50/60 Hz.
Mounting support - Floor-standing or Wall mounting
Environment - Ambient air temperature for operation -5…40 °C
Relative humidity - 0…90 %
Operating altitude - 0...2000 m
Standards - EN 61000-6-2, EN 61000-6-4, EN 61558-1

Technical Specification No. 6:

(A) The contractor shall Supply, laying testing & commissioning of Main Power cable from Inverter to Meter of 70 Sq. mm., 4 core Alu, Armored cable as per site requirement as directed by Engineer in-Charge.

(B) The contractor shall Supply, laying testing & commissioning of Output Power cable from Inverter output pole to pole with 16 Sq. mm., 4 core Alu, Armored cable as per site requirement as directed by Engineer in-Charge.

The contractor shall arrange all types of tools, tackles, scaffoldings, temporary power supply at his own cost for installation, testing & commissioning of the work.
submit layout colored drawing of complete Rooftop Solar Power Plant System in two set hard copy & soft copy after completion of work to DPA. The work shall be executed to the satisfaction of the Engineer in-Charge.

Signature & Seal of Firm

Executive Engineer (E)
Deendayal Port Authority

Approved Make List of Electrical Items		
Sr. No.	**Description**	**Recommended Makes**
1	HVVCB	Siemens/Crompton Greaves/ABB/Schneider
2	HV Gas Insulated Breaker	Siemens/Schneider/ABB
3	Power Transformer	Voltamp/ Crompton Greaves/ Bharat Bijlee/ BHEL/ Siemens/ ABB/ Schneider/ T&R
4	DistributionTransformer	EMCO/Kirloskar/Patson/Voltamp/ABB/ Schneider/ T&R
5	Resin Cast Transformer	Voltamp/Kirloskar/EMCO
6	Dry Cast Transformer	Voltamp/Kirloskar/EMCO
7	HT XLPE Cable	Polycab/Torrent/RPGAsian/Gloster/Unistar
8	LT XLPE Cable	Polycab/Torrent/RPGAsian/Rallison/Primecab/ Havells/Unistar/ Avocab/ Allcab/ Adcab
9	LT ACB	Siemens/LKE&A/SchneiderElectric/C&S
10	Protection Relay	Areva/LKE&A/Siemens/ABB/C&S
11	LT Panel	CPRIApproved
12	Changeover Switch	Siemens/ LK E&A/ ABB/C&S/ Schneider Electric/ Legrand/ Indoasian
13	SFU for Main LT Distribution Panel	Siemens/LKE&A/ABB/C&S
14	SFU for Distribution Panel & Feeder Pillar	Siemens/ LK E&A/ ABB/C&S/ Schneider Electric/ Legrand/ Indoasian/ Havells
15	MCCB for Main LT Distribution Panel	Siemens/LKE&A/ABB
16	MCCB for Distribution Panel& Feeder Pillar	Siemens/ LK E&A/ ABB/C&S/ Schneider Electric/ Legrand/ Indoasian/ Havells
17	MCB/ ELCB/ RCCB/ RCCBO for Main LT Distribution Panel	Siemens/Hager/LKE&A/ABB
18	MCB for Distribution Panel& Feeder Pillar	Siemens/ LK E&A/ ABB/C&S/ Schneider Electric/ Legrand/ Indoasian/ Havells/ Standard
19	Distribution Board	Standard/Hensel/Legrand/Indoasian/Havells
20	Multi-Function Digital Meter for Main LT Distribution Panel/ Digital kWh Meter	LKE&A/Enercon/Secure/L&G/Rishabh
21	Analog Volt/Ampere Meter for Distribution Panel &Feeder Pillar	Rishabh/AE/Enercon/LKE&A

22	Selector Switch for Voltmeter/Ampere Meter	LK E&A/Siemens/C&S
23	Power Contactor & Overload Relay	LK E&A/Siemens/ ABB
24	Quartz Time Clock Switch	LK E&A/Indoasian/Siemens
25	PVC Wire with Copper Conductor	RR Kabel/KEI/Polycab/Milex/ Gujcab/Standard/ Finolex/Anchor
26	Flush type Switch, Socket, Holder, Ceiling Rose& Electronic Regulator	Anchor/MK/Northwest/Vinay/Panama/Havells
27	Bells/Call Bells	Anchor/Legend/MK/Northwest
28	Modular Switch, Socket, Plate &Box	Anchor/MK/Northwest/Legrand/Havells/Indoasian/ Siemens
29	PVC Conduit/ Oval Conduit & Casing Capping and Accessories	Precision/Vulcan/Finolex/Garware/Restoplast/ Swastik/BPI
30	Lamp & Fluorescent Lamps	Philips/Bajaj/Wipro/Crompton/Osram/Surya Roshni/GE
31	HPMV & Metal Halide Lamps	Philips/Bajaj/Wipro/Crompton/Osram/Surya Roshni/GE
32	Ignitor for HPSV & Metal Halide Lamps	Philips/Bajaj/Wipro/Crompton/Osram/Surya Roshni/GE
33	Luminaries	Philips/Bajaj/Wipro/Crompton/Osram/Surya Roshni/GE
33	LED Luminaries	Philips/Bajaj/Wipro/Crompton/Surya/Pyrotech/Syska/ Nessa/Havells having Surge Protection ≥ 10 kV for Fittings& Internal Surge Protection for Driver of ≥ 4kV, LED Chip of only OSRAM/ CREE/ Philips Lumileds/ Citizen/ Nicia, with LM-79 & LM80 Certification
34	Ceiling Fan	Bajaj/Orient/Usha/Crompton/Almonard/GEC
35	Wall mounting Fan	Bajaj/Orient/Usha/Crompton/Almonard/GEC
36	Exhaust Fan	Bajaj/Orient/Usha/Crompton/Almonard/GEC
37	Heavy duty Industrial Wall mounting Fan	Bajaj/Orient/Usha/Crompton/Almonard/GEC
38	Water Cooler	Voltas/Usha/BlueStar
39	Air Conditioner	Voltas/Carrier/BlueStar/Usha/Hitachi/LG/Samsung/ Onida
40	Refrigerator	Voltas/Carrier/BlueStar/Usha/Hitachi/LG/Samsung/ Whirlpool

41	Voltage Stabilizer	Veeline/Capri/Mindra/Kankai/KPS/
42	Inverter	Sukam/Microtek/Luminous/Hitachi/Mindra
43	Engine for D.G. Set	Cummins/ Greaves/ Kirloskar/ Caterpillar/ Ashok Leyland/ Volvo
44	Alternator for D.G. Set	Stamford/ Crompton Greaves/ Jyoti/ Kirloskar Electric
45	Electric Motor	Alstom/ Crompton Greaves/ Siemens/ Kirloskar/ ABB
46	Water Pump	Swastik/KSB
47	Water Geyser	Bajaj/ Usha/CromptonGreaves/Spherehot/ Racold
48	Lug & Cable Glands	Dowells/Jainson/Braco
49	Solar PV Module	Waaree/Adani/Raaj/Goldi

Signature & Seal of Contractor

Executive Engineer (E)

Deendayal Port Authority

TERMS AND CONDITIONS

(1) Time Schedule: The work shall be completed within 60 days from the date of issue of Work Order.

(2) The bidder, at his own responsibility and risk is encouraged to visit and examine the site of work and its surroundings and obtain all information that may be necessary for preparing the Bid. The costs of visiting the site shall be at the Bidders' own expense.

(3) DPA will award the work to the bidder whose bid has been evaluated to be techno – commercially responsive and the lowest valuated amount bid.

(4) Work shall be guaranteed for 12 months from the date of completion of the work.

(5) The rates should be quoted in figures and words both. In case of difference in figure & words, the rate mentioned in words will be considered.

(6) The contractor shall affix SEAL along with SIGNATURE in the Offer.

(7) The work shall be carried out in accordance with the best standards of workmanship and to the entire satisfaction of the Engineer in-Charge.

(8) Security Deposit @ 5% recovered from the bill and the SD can be released only after successful completion of guarantee period.

(9) **Payments Terms**: All payments shall be made in Indian rupees unless specifically mentioned.

- 70% of supply item rate against receipt of material at site in good condition after obtaining insurance cover as per tender condition (if TPI appointed then after inspection & certification of the same by Third Party Inspection Agency).
- 20% of supply item rate after completion of erection, installation, testing and commissioning, etc. (if TPI appointed then after inspection & certification of the sameby Third Party Inspection Agency)
- 90% of item rate covers only laying/fixing/installation.
- Remaining 10% will be released after successful completion of whole work (if TPI appointed then after inspection & certification of the same by Third Party Inspection Agency).

(10) Payment will be made by RTGS only after satisfactory completion of work and submission of duly signed bill.

(11) The contractor shall not deposit any materials at such a place that may cause inconvenience to the public or staff or near by offices.

(12) 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. Necessary barricading shall be done by the contractor at his own cost if required.

(13) Income-tax and surcharge as applicable will be deducted from the bill while making payment to the contractor for carrying out the work and only net amount shall be paid to the contractor.

(14) All the materials should be got approved from Engineer-in-Charge before put in

to use.

(15) All the rules and regulations governing DPA will be applicable.

(16) After completion of the work, the site should be neatly cleaned by the contractor.

(17) The contractor shall ensure not to cause any damages to the port properties in the

Vicinity of work site during execution of work. If any damage occurs due to workmen/

Machinery of the contractor, the contractor has to make good the loss/damage at his cost.

(18) For Entry & exist of material and contractor personnel, pass shall be arranged by firm.

(19) The contractor shall quote the price exclusive of GST. The contractor shall quote prevailing GST rate separately, which shall be reimbursed by DPA after ascertaining necessary compliance as per Goods & Service Tax, 2017. All other duties, taxes, cesses applicable if any, shall be borne by the contractor.

Income-Tax deductions and surcharges applicable there on shall be made good while making payments due to the contractor for carrying out the work and only net amount shall be paid as directed by the Central Board of Direct Taxes, Ministry of Finance, Government of India.

The rates quoted by the contractor shall be deemed to be inclusive of the taxes, duties etc. which the contractor will have to pay for the performance of this contract, except GST. The employer will perform such duties in regard to the deduction of such taxes at sources as per applicable law.

(20) All the work shall be carried out to the entire satisfaction of Engineer in-Charge.

Signature & Seal of Contractor

Executive Engineer (E)

Deendayal Port Authority