## SYAMA PRASAD MOOKERJEE PORT, KOLKATA

## (Formerly Kolkata Port Trust) HALDIA DOCK COMPLEX

## QUERIES OF DIFFERENT FIRMS IN CONNECTION WITH THE PRE-BID MEETING HELD ON 28.12.2020.

for

"Design, Supply, Installation, Testing and Commissioning of 25 Nos. 30 Mtrs. high Hot Dip Galvanized High Mast Tower with LED fitting and replacement of LED luminaires on 40 Nos. existing 30 Mtrs. High Mast along with Comprehensive Maintenance Contract of 5 years at Haldia Dock Complex, SMP, Kolkata (Phase-II)"

Tender No. SDM(P&E)/T/ 74 /2020-2021 E-Tender No. 2020\_KoPT\_600112\_1

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
1.	Page 79-81, Clause No.14, List of Approved makes.	<ul> <li>kindly incorporate the below amendments in the said Tender:-</li> <li>Inclusion of the Brand Name of "Lighting Technologies" in the HIGH Mast Make.</li> <li>Inclusion of the Brand Name of "INVENTRONICS" (Our LED Driver OEM Partner - having all necessary BIS Certifications) in the LED Driver Make.</li> </ul>	Tender condition prevails.
2.	Page 79-81, Clause No.14, List of Approved makes.	Kindly add WMEL OR "Equivalent" Luminaire along with the already stated makes in the tender.	Tender condition prevails.
3.	Page 5-6, Clause No.3.5, SOT	As per Government of India notification of "Atmanirbhar Bharat Package 3.0" released on 12-11-2020, EMD will not be required for the subject tender and will be replaced by Bid Security Declaration. Therefore, we request you to amend the tender notification and send us the draft Bid Security Declaration at earliest.	

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
4.	SECTION - VI TECHNICAL SPECIFICATION A) Design Scope:- Criteria:	Avg 25 lux or min 25 lux on periphery needs to be maintained?	Refer Page No.29, clause No.2.0 A) criteria.
	Page 29, Clause No.2.0		
5.	SECTION - VI TECHNICAL SPECIFICATION	Is there any particular requirement pertaining to illumination /Luminaires other than lux level?	Refer Page No.29, clause No.2.0 A) criteria.
	Page No.29 & 69		
6.		Will total power loading calculation of luminaires be considered at the time of commercial bid evaluation?	Bidders are required to fill Nos. of luminaire and wattage of luminaire per HM tower in Part E of bidding Form -VI of the tender, which would be required during technical evaluation of the bid.  However, commercial evaluation would be done referring Page No.163, Part E & Page No.23, Clause No.5.32.
7.	Page No.69, clause No.7	Maintenance factor to be considered for lux level design?	Refer Page No.69, clause No.7
8.	Page No.69, clause No.7	Is there any wattage limitation for fixtures?	Refer Page No.69, clause No.7
9.	Page 7, Clause No.3.5(ii)	Can bidder opt for Bank Guarantee for full amount of EMD value Rs 22,82,685.00? Please confirm.	Tender condition prevails.
10.	SECTION - VI TECHNICAL SPECIFICATION A) Design Scope:- Criteria: Page 29, Clause No.2.0	Typical Lighting calculation to be worked out with single high mast to achieve minimum 25 lux at a radius of 60 mtrs.  Or  the lighting calculation to be worked out taking the light contribution of near by high mast also. Please confirm.	Typical Lighting calculation is to be worked out with single high mast as per scope of work.

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
		We propose to conduct Demonstration of lux level at site as per desire illumination level.  This can be conducted after technical bid opening i.e. during technical scrutiny stage.	Tender condition prevails
11.	Clause no. 6.1.14 - Power tool an d Control panel	Requirement of 4CX2.5sqmm cable is clear. This cable used for Integral motor and it is used between HM feeder pillar and mast bottom.  However, requirement of two nos. control panel (with F/R Contactor) is not clear. Please elaborate the same. Control panel and feeder pillar are same in meaning.	Control panel and feeder pillar are not same. Normal Operation of High mast would be done through Outdoor feeder pillar with intelligent smart lighting control system at the base of the mast.  O2Nos. portable Control panel and pendent switch, would be required for raising and lowering operation of High Mast incase Outdoor feeder pillar with intelligent smart lighting control system is under maintenance.
12.	Data Sheet for New 30M HM tower Page 68	For 1.5KW (2.0 HP) motor, operting speed shall be 900RPM instead of 1400RPM	Please see addendum.
13.	Clause no. 7.0 - LED Luminaires, Page 71	Driver shall have 4kV internal surge protection. 10kV external SPD shall be provided	Tender condition prevails.
14.	Clause 12.0 Earthing System, Page No.74	Please provide separate Earthing drawings for Sr No. 9.0 (part A-9 of Form VI) and 17.0 (part B-5 of Form VI) of BOQ	Please see addendum.
15.	Clause 12.0 Earthing System, Page No.74	"Earthing Strip shall be of hot dip GI of size 50mmx6mm for Body & of Copper 50mmx6mm for Neutral protected against corrosion and readily accessible. The strip shall be connected to earthing terminals with Stainless Steel nut - bolts. Separate Earthing for Body and	Please see addendum.

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
16.	Tech details of Existing	Neutral shall be provided".  Please clarify is neutral and body earthing of package sub-stn included in Sr No. 9.0 and 17.0 or it is to be considered in sub-stn items. Please provide drawing for neutral and body earthing also.  In data sheet of existed HM, Integral and External power tool is	i)Existing HM :-16Nos. High Mast towers
	HM tower, Page 77-79	mentioned.  If the existed power tool is External (common) power tool, then HDC is looking for Integral power tool? Pls reply.  If yes, then how forward/Reverse operation of motor will be carried out? In case of external power tool, there is no raise/lower control in the feeder pillar.	have Integral and 24Nos. High Mast towers have External power tool.  ii)Yes, integral power tool is required in existing as well new High Mast Towers.  iii) Forward/Reverse operation of motor:-  a) Existing High Mast would be operated through 02Nos. portable Control panel and pendent switch supplied with new High Mast towers.  b) New high Mast Towers would be operated by newly supplied Outdoor feeder pillar with intelligent smart lighting control system at the base of the mast.
17.	List of approved makes, Page No. 79-81	List of approved makes - Package outdoor sub-stn., VCB panel Siemens/Schneider/ABB makes are mentioned.  We request to pls. incorporate OEM's authorised system Integrator/franchisee for the sub-stn and VCB panel. OEM make as mentioned here generaly do not deal in small volume jobs.	Tender condition prevails.
18.	List of approved makes, Page No.	List of approved makes -	Refer Page No.29, ,Clause No.47 C.

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
	79-81	Load point panel (IP-65, SS-316 grade panel)  A Bond Stand/Eltech Controls/Megawin makes are mentioned.  In addition to this, we request to pls add ERDA/CPRI approved panel	
		manufacturer.	
19.	Non-Comprehensive / Comprehensive Maintenance Contract, Scope of work, Page 83	HDC has mentioned "all material will be supplied by HDC at Page No. 84." However, at page no. 85, clause no. xxiii, HDC has mentioned "HDC will not supply any material."  Please check this contradictory sentences and confirm the scope.	Please see addendum.
20.	BOQ_635110 (excel sheet), Sr No. 24, Part-E	In column "M" bidder has to insert wattage of each luminaire and in column "N" quantity of luminaire per HM is required. This will calculate energy consumption and energy charges of 1 no. HM only for 10 years. However, referring to the total quantity of highmast, this calculation to be done for all existed and new HM to understand the total energy consumption.  Please review this point and reply.	Please see addendum.
21.	BOQ_635110 (excel sheet),	Please provide trench diagram.Sr No. 7(ii) - Laying, testing and commissioning of LT Cables by excavating trench	Please see addendum.
22.	BOQ_635110 (excel sheet)	Sr No. 1.03 - Dismantling, Transportation, re-installation, Testing and Commissioning of existing 30Mtrs. High Mast Towers.  HM accessories (winch, power tool, wire rope, trailing cable etc) for 7 nos. HM which are to be dismantled and re-erected is not covered in the BOQ. Please check and confirm.	Agreed. HM accessories (winch, power tool, wire rope, trailing cable etc) for 7 nos. HM which are to be dismantled and re-erected are not covered in the BOQ.
23.	BOQ_635110 (excel sheet)	Sr No. 7.06 & 16.06 - Laying of LT/HT cable By 150NB GI Pipe throug h  Boring	Manual/HDD based on site condition.

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
		LT/HT grade cable is to be laid by 150NB GI pipe through boring.  Please clarify which type of boring is this?	
24.	General Requirement, VCB Panel, Page No.33	"The controls, indicating lamps, relays and meters shall be mounted on separate control & relay panel".  The controls, indicating lamps, relays and meters shall be mounted on LV compartment of the same panel.  Separate C&R panel not envisaged.	Agreed. Separate C&R panel not required. Controls, indicating lamps, relays and meters shall be mounted on LV compartment of the same panel.
25.	General Requirement, VCB Panel, Page No.33	All circuit breaker truck shall have service, test and draw out positio n. Test position shall engage only the auxiliary (control) contacts to close the CB during testing. Circuit breaker shall have two distinct positions Viz Service and TEST	Agreed. However, Test position shall engage only the auxiliary (control) contacts to close the CB during testing.
26.	General Requirement, VCB Panel, Page No.33	Manual operation shall be at a height not less than 450 mm and shall not exceed 1850 mm from the finished floor level.  Total Height Of Panels shall be 2500/2600 mm max . Shall be confirmed during detailed engineering	Agreed. Manual operation shall be at a height not less than 450 mm and shall not exc eed 1850 mm from the finished floor level
27.	General Requirement, VCB Panel, Page No.33	It shall be possible to switch on the earthing switch only when the truck is in the isolated position, wherever an integral earth switch is provided.  Non Fault Making Earthing Truck shall be provided instead of earthing switch.	Tender condition prevails.
28.	vCB Panel x) Busbar & Connections, Page No.35	"Design ambient temperature shall be 50degree C & final operating temperature under continuous operation in enclosure limited to 90degree C by thermometer method"  Temperature rise of various parts of the switchgear shall be within limits as per IEC 62271-1:2017 for silver plated joints of the bus bars.  "Bus bar support insulators of non-hygroscopic material having high impact and dielectric strength with an anti tracking contour.".	Tender condition prevails.

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
		The offered bus bars shall be self-supporting & they shall be supported from spout bushing of the circuit breaker itself. Please note that the switchgear shall be type tested (including internal arc test) without bus bar support insulators. Hence, we do not envisage separate insulators for supporting the bus bars. Support less bus bar design is the new trend and is adopted by leading switchgear manufacturers globally.	ļ
		"Phase identification by colour in each panel".  We shall provide R,Y,B colour coded stickers on bus bars at regular interval for easy phase identification. However, we do not envisage colour coding of the bus bars.	Agreed. Sufficient numbers of R,Y,B colour coded stickers on bus bars at regular interval to provided for easy phase identification.
29.	VCB Panel xi) Internal control Wiring, Page No.35-36	"Control wiring shall be carried out by 1100V grade PVC insulated; si ngle core multi stranded copper wire of minimum cross section 2.5 s q. mm. Similarly, for CTcircuits minimum cross section of 2.5 sq. mm shall be used".  Control wiring shall be 2.5 Sq mm for CT circuits & 1.5 Sqmm for other circuits & shall be FRLS type.	Tender condition prevails.
30.	VCB Panel xii) External Terminations, Page No.36	Terminal Block- We shall provide 10% spare terminal blocks depending upon the availability of space in the metering compartment during detailed engineering. During detail engineering we shall confirm the exact clearances. Distance between 2 rows of terminal block shall be as per our standard practice.	Tender condition prevails.
31.	VCB Panel xvi) Potential Transformer, Page No.37	"High voltage side of PTs shall have fuses and MCCB's on low voltage side"  On LV side MCB shall be provided.	Agreed.
32.	VCB Panel	"Spare annunciation points shall be wired upto terminal blocks. 20%	Tender condition prevails.

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
	xix) Annunciator, Page No.38	spare facias shall be provided".  20 % spare facia shall be provided based on the space availability & decided during detailed engineering	
33.	VCB Panel  xxi) Earthing Devices, Page No.39	"Either integral earthing switch or a separate earthing switch shall be provided to facilitate earthing of busbars and any feeder circuit". Separate Non-Fault Making Earthing trucks - Cable Side & Bus Side shall be provided instead of integral Earth Switch.	·
34.	VCB Panel xxv) Protective Earthing, Page No.40	"Continuous earth bus of minimum size 50x6 mm of copper or equivalent aluminum/galvanized steel section, designed to carry the peak short circuit and short time fault current as specified."  Earth Busbar of Copper having cross section 30 x 8 mm shall be provided throughout the panel length	Agreed. Earth Busbar of Copper having cross section 30 x 8 mm can also be provided.
35.	VCB Panel  xxvii) Construction Features -  Mechanical Design, Page No.40	"Minimum sheet steel thickness: doors and covers - 2 mm cold rolled, other load bearing members - 2.5 mm"  Panels are made of Aluzinc material, which is corrosion proof. Aluzinc sheet thickness shall be 2.0 mm. However front doors and end covers are made of CRCA sheet thickness 2 mm with special reenforcement. The design has been type tested for full short circuit rating for internal arc resistance.	Agreed. Successful Bidder to submit Type test reports for approval during detail engineering.
		"Degree of protection shall be IP5X"  Degree of Protection shall be IP 4X.	Tender condition prevails. Provide Degree of protection IP5X.
36.	Painting	We shall have offer panels made up of special material called "Alu Zinc". Alu Zinc is light in weight, has more strength, and extremely corrosion resistant compared to normal CRCA sheets and this does not require any surface treatment like powder coating. Panels shall be made up of Alu Zinc material except front doors & end covers which shall be painted sheet steel. We shall provide powder coated	Agreed.

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
		paint only for front doors and end covers, which shall be made of CRCA sheet. However, painting procedure and thickness shall be as per our standard procedure.	
37.	Indoor VCB Panel Incoming Feeder with PT, Page No.41-42	"Incoming cable entry box shall be provided for the required cable entry."  Cable termination from bottom & rear shall be in cable compartment. Cable termination kits, glands, lugs etc. shall not be in our scope. Separate Cable Box is not envisaged.  N) "The Trivector meters shall be digital type of approved make and it should display Amps, Volts, kVA, kW, kWHr, kVAR, PF and MD etc. The meter shall provide with external port for remote monitoring".  -TVM shall be of Non - ABT type  Z) Bus bar support insulator- Please refer the above comment row 28 above .lts not envisaged.	Please see addendum.  Cable termination kits, glands, lugs etc. is in the scope of the bidder.  N) TVM can be non-ABT type but shall have all features as per tender specification.  Z) Bidder to submit Type test reports for approval during detail engineering.
38.	Outdoor Package Sub-station  Page No.43	"The Package Substation Unit shall be manufactured at original equipment manufacturer's factory and shall have outdoor enclosure of hot dip galvanised sheet steel 1.5 mm thick with 2.5 mm thick base, dust and vermin proof and suitable for outdoor installation and shall be provided with lifting hooks. The partition between the compartments shall be 2.5 mm thick".  The thickness of enclosure shall be 1.5 mm for non load bearing members & 2mm for load bearing members.	Tender condition prevails.
39.	Outdoor Package Sub-station  4.1 HT Panel  Page No.45	11KV CTs of suitable ratio with suitable VA burden and accuracy class 1.0 for metering, 5P10 for protection conforming to IEC 60185.  Self Powered Relay Ashida / C&S make shall be used in RMU for O/C & E/F protection having Modbus Communication over RS 485 port.	Please see addendum.  Agreed. Separate Cable box is not

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
		"Incoming cable entry box shall be provided for the required cable entry".  Incoming cable in RMU shall be from cable compartment from front & bottom. Separate Cable box is not envisaged	required. However cable box shall be suitable for termination of 2R x 3C x 185sqmm, Aluminium, armoured UG cable.
40.	Outdoor Package Sub-station 4.2 Transformer Page No.47	"The lifting lugs and rollers shall be provided."  Bidirectional rollers are not applicable for transformer inside CSS.  Lifting arrangement shall be provided for complete CSS.	Please see addendum. Lifting arrangement shall be provided for complete CSS.
		"The winding insulation shall be of Class 'F" and temperature rise limit to Class B i.e. 130 deg. C"  The winding insulation class shall be H & temperature rise shall be	Tender condition prevails. Winding insulation shall be of Class 'F" and temperature rise limit to Class B i.e.
		<ul><li>115 Deg above ambient.</li><li>"The transformer shall be so designed it should have minimum losses and it shall be submitted by the Bidder".</li><li>Transformer losses shall be considered as per IS.</li></ul>	130 deg. C".  Please see addendum.
41.	Outdoor Package Sub-station  4.3 LT Panel/ switchgear  Page No.49	"All outgoing feeders shall have phase indicating led lamps and Multifunction Meter".  MFM shall be provided for incomer. There is space constraint for o/g. Hence shall not be provided	Tender condition prevails.
42.	Outdoor Package Sub-station  4.4 150 kVAR APFC Capacitor Panel, Page No.50	"The panel shall be a cubical type metal clad board equipped with Microprocessor based intelligence version APFC relay with 3 phase CT sensing"	
	Page No. 49-50	We propose Single Phase CT sensing APFC relay - Make ABB Model RVC.	Please see addendum. Provide Single Phase CT sensing APFC relay.
		"The capacitor offered shall be non self-heating type, super heavy	Please see addendum. Provide Capacitors Self Healing, MPP, Heavy

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
		duty long life MPP type conforming to IS 2834 and IS 13585".	Duty type confirming to IEC 60831.
		Capacitors shall be Self Healing MPP Heavy Duty type confirming to IEC 60831.	
		"Capacitors are also to be provided 0.2% series Reactor to limit the fault current or inrush current during switching operations along with ON delay timer on individual feeder."	Please see addendum. Series Reactor shall not require.
		Series Reactor shall not be provided as it is only applicable for standalone APFC panel.	
		"Relay shall be suitable for operation at low load and current sensitivity shall be equivalent to 1%".	Tender condition prevails.
		Minimum Load % required for relay operation shall be confirmed during detailed engineering.	
		"The capacitor should be of rating as indicated in the Bill of Quantities, to provide for a gradual increase in KVAR ratings in steps".	Step wise ratings to be finalized during detail engineering.
		Please share the step wise ratings to check whether this can be accomodated inside CSS.	aram ang maramg
43.	Outdoor Package Sub-station  4.9 Cable Termination, Page No.53	"Cable entries and terminals shall be provided in the Distribution Boards to suit the number, type and size of aluminium conductor power cables and copper conductor control cable specified".	To be finalized during detail engineering. Provision to be kept accordingly.
	Page No.49-50	Please provide the number of cable termination along with the cable sizes to check suitability / provision.	
44.	Outdoor Package Sub-station 4.11 Internal Wiring, Page No.54	"Wiring inside the switchgear/panel shall be carried out with 1.1 kV grade, zero halogen FR stranded conductor wires. Minimum size of conductor for power circuits is 4 sq mm copper. Control circuits shall be wired with copper conductor of at least 2.5 sq. mm for CT circuits	Please see addendum.

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
	Page No.54	/other control circuits".  Control ckt for LV shall be 2.5 mm sq for CT Ckt , 2.5 mm sq for control ckt & 4 mm for earthing.	
45.	Outdoor Package Sub-station  4.14 Labels, Page No.55	"Labels shall be anodised aluminium with white engraving on black background shall be provided for each incoming and outgoing feeder of Distribution Boards. Labels shall be properly secured with fasteners".  Labels & Name plate shall be as per vendor standard practice.	Tender condition prevails.
46.	Outdoor Package Sub-station  4.15Test At Manufacturer Works  Page No.55	"Type test certificate for similar type & Rating of Outdoor Package Substation Unit manufactured as per IEC 61330/62271-202 be submitted by the successful tenderer".  Routine Test shall be conducted in factory s per QAP. Type test Certificates shall be submitted for review. Vendor shall not repeat any type test even at extra cost.	Please see addendum.
47.		We request to please provide detailed BOQ and GA drawing for VCB panel and package sub-station.	Submission of BOQ and GA drawing of VCB panel and package sub-station is in the scope of the successful bidder as per tender specification.
48.	Page 2-3 , Clause No.2.1.2	The scope of the tender covers installation of 25 Nos. 30 Mtrs. High Mast Tower with LED lights and change of LED lights in 40 Nos. existing 30 Mtrs. High Mast along with power generation arrangement. Also the LED lights will be controlled through smart lighting system. Thus the major emphasis should be given for Smart LED lighting system.  We request to amend the credibility of similar works as "Firms havinf experience in "DSITC of smart LED lighting system at Port Sectors/	Tender condition prevails.
		experience in "DSITC of smart LED lighting system at Port Sectors/ Central Govt./State govt./PSU/other reputed organisations".	

SI. No.	Reference	Queries of the firms	HDC, SMP's Clarifications
49.	Page 79-81, Clause No.14, List of Approved makes.	We request you to incorporate make of "SIMOCO" for drivers as well as LED light fixtures.	Tender condition prevails.
50.	Page 79-81, Clause No.14, List of Approved makes.	We request you to add prominent makes of High Mast available in west Bengal. These are Utkarsh, BP Projects, Skipper.	Tender condition prevails.
51.	Page 2-3 , Clause No.2.1.2	We request you to make provision for Joint venture or consortium bidding so that all compartments of the work can be taken up with maximum efficiency.	Tender condition prevails.
52.	Page 6-7, Clause No.3.11	Requested to extend due date of tender by at least 10days so that potential vendors can participate.	Due date of submission of bid will be extended 15days from the date of upload of pre-bid queries. Please see addendum.