

STANDING CONFERENCE OF PUBLIC ENTERPRISES

(An Apex body of Public Enterprises)

SCOPE Complex, Lodhi Road, New Delhi-110003.

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Date:24/01/2020

Ref No.: SCOPECOMPLEX/AGM/MMO/19-20/35/1606

NOTICE INVITING TENDER

1. Online e-tenders are invited by Addl. General Manager (Tech.), SCOPE on behalf of Constituents of SCOPE COMPLEX, LODI ROAD New Delhi- 110003 for the following work:

1.1	Name of the work	Design and Supply, Installation, Testing and Commissioning of 10 kWp Battery Back-up SPV Power plant of SPV (solar photovoltaic) for the outer periphery lighting at SCOPE COMPLEX, Lodi Road, New Delhi – 110003.
1.2	Estimated Cost	Rs.9,69,000/-plus GST @ 12%.
1.3	Earnest Money	Rs19,500/-
1.4	Tender Processing fee	Rs.858/-
1.5	Time for completion	Two Months from the date of issue of LOI.
1.6	Cost of Tender	Rs.560./-
1.7	Commencement of downloading E-Bid	24.01.2020 from 10.00AM.
1.8	Last date of downloading of E-Bid	05.02.2020 Up to 03.00PM.
1.9	Last date of E-Bid submission	05.02.2020 Up to 03:00PM.
1.10	Last date of submission of hard copy of EMD& Cost of Tender	05.02.2020 Up to 03.00PM.
1.11	Tender opening date & time(technical)	05.02.2020 at 04.00PM.
1.12	Tender Opening date & time (Financial)	To be intimated later.

2. Bidders have to download the Bid documents from the e-procurement portal i.e. www.tenderwizard.com/SCOPE after registering themselves on portal and submit e-bids after payment of tender processing fee before last date & at time of

downloading the e-bids online. Bidder can also view the NIT, scope of work on www.scopeonline.in.

3. Bids shall be submitted through e-bidding mode only. No other mode of bid submission shall be accepted.

4. Tender document shall be accepted only from reputed specialized contractors/Manufacturer working experience with CPWD /PWD/MES/Railway/PSUs/Autonomous Bodies/SCOPE who fulfil following pre-qualification criteria & showing the original document in this regard:

4.1 Proof of having successfully completed similar works during the last 05 years ending last day of the month previous to the one in which applications are invited:

Three similar completed works, each costing not less than the amount equal to 40% of estimated cost put to tender.

OR

Two similar completed works, each costing not less than the amount equal to 60% of the estimated cost put to tender.

OR

One similar completed works of aggregate cost not less than the amount equal to 80% of the estimated cost.

Similar work shall here mean **“Design and Supply, Installation, Testing and Commissioning of 10 kWp Battery Back-up SPV Power plant” for Govt. Offices, building and Industry”**.

4.2 The tenderer must be registered under ESI, PF, GST & Income Tax act and PAN No. copies of registration papers along with details need to be furnished latest ESI & PF deposit with challan authority is also needed, subject to verification with the original documents if required.

4.3 Average annual financial turn over should be at least 1.5 times of the estimated cost during the immediate last 3 consecutive financial years.

4.4 Proof of Balance sheet for previous consecutive three years with ITR.

4.5 Copies of similar works executed for High Rise Office building completed during last three years, along with work order, client's performance certificate & completion certificate.

5. The tender shall be submitted: thorough only portal i.e. www.tenderwizard.com/SCOPE.

6. Tenderers are invited to submit their offers strictly based on the terms & conditions and specifications given in the tender document and instruction to bidder.

7. Tenders are invited to submit their offers strictly based on the layout, design parameters, specific requirements, terms & conditions and specifications given in the tender's documents.

8. **Hard copy of Forms of Tender Duly signed and stamped must be submitted along with the EMD & Cost of Tender.**
9. Cost of Tender & Earnest money mentioned above should be paid by crossed Demand Draft/Pay orders from any nationalized /Schedule Bank in favour of **“SCOPE COMPLEX MMO ACCOUNT”**. Tenders without Earnest Money Deposit will be summarily rejected and the representative of such tenderers will not be allowed to attend tender opening.
10. All the above certificate/Documents shall be uploaded by the firm duly signed & self-attested subjected to verification with the original documents.
11. Pre-bid Conference shall be held at 3.30PM on 31.01.2020 if required.
12. SCOPE reserves the right to reject any or all tenders without assigning any reasons.

Addl. General Manager (Tech.)

SCOPE OF WORK

The SCOPE COMPLEX is a state of art office building located at LODI ROAD, New Delhi-110003 comprising of 8 tower where space is reserved for offices of various Govt. of India Enterprises, Banks etc. It is intended to install (02X 05kWp) solar photovoltaic power plant (with battery bank) for pole lights installed in outer parking/periphery at SCOPE COMPLEX, LODI ROAD, New Delhi - 110003.

The general scope under this contract includes to design, manufacture, testing, inspection, packing and forwarding, transportation up to project site, loading& unloading, storage in safe custody, erection, carrying out inspection, tests at site, commissioning, performance testing, operation and maintenance for 05 years & handing over to the purchaser all the equipment installed for (02X 05KWp) SPV Power plant at SCOPE COMPLEX, New Delhi.

- a) Site survey and layout planning.
- b) Analysing roof top shadow free area at SCOPE COMPLEX the site.
- c) Design, development and supply of all component of the SPV Power Plant up to LT side.
- d) Approval by electrical inspector/CEA will be obtained by the contractor.
- e) Installation of meters with net metering facility and associated hardware will be provided by the contractor/DISCOM and the cost shall be borne by the contractor.
- f) Covered and secured space for the control room to keep the battery bank, power conditioning unit and accessories at the distance of less than 20 meter from the solar array will be under guidance of engineer in charge / competent authority of SCOPE COMPLEX.
- g) Construction of roof /strengthening /modification /levelling of roof / land etc needed for proper installation of SPV plant shall be under scope of contractor.
- h) Regular cleaning of SPV Modules after commissioning of the plant at interval of 20-30 days shall be carried out by contractor.
- i) Provided all required documents for claiming subsidy/CFA from MNRE will be in scope of contractor.
- j) Providing training to the personnel deputed by SCOPE.

A Rooftop Photo Voltaic (SPV) power plant with Battery bank consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables and switches. PV Array is mounted on a suitable structure. Hybrid SPV system is with battery and should be designed with necessary features to supplement the battery power during night time. Components and parts used in the

SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

Solar PV system shall consist of following equipments/components.

- i. Solar PV modules consisting of required number of crystalline PV modules.
- ii. Grid interactive/ Battery Bank Power Conditioning Unit with Remote Monitoring System.
- iii. Mounting structures
- iv. Junction Boxes.
- v. Earthing and lightening protections.
- vi. IR/UV protected PVC Cables, pipes and accessories.

01. PLANNING AND DESIGNING:

1. The bidder should carry out Shadow Analysis at the site and accordingly design strings & arrays layout considering optimal usage of space, material and labour. The bidder should submit the array layout drawings along with Shadow Analysis Report to Engineer in Charge/MMO/Owner for approval.
2. MMO SCOPE reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements.
3. The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidders submit three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

02. DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT:

1. The Contractor shall furnish the following drawings Award/Intent and obtain approval.
2. General arrangement and dimensioned layout.
3. Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, battery bank, Junction Boxes, AC and DC Distribution Boards, meters etc.
4. Structural drawing along with foundation details for the structure.

5. Itemized bill of material for complete SV plant covering all the components and associated accessories.

03. TEST CERTIFICATES:

Test certificate /reports for the BoS items/components can be from any of the NABL/IEC Accredited Testing Laboratories or MNRE approved test centres.

04. SAFETY MEASURES:

The bidder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc.

05. WARRANTY:

1. The Warranty period shall be 25 Years for the PV modules and 5 years for complete system from the date of commissioning and handing over of the system (or as per latest MNRE, GOI guidelines). The warranty as per standard norms is 05 yrs inclusive of comprehensive warranty. Any defect or damage arise solely due to faulty design, materials and workmanship, shall be repaired/replaced free of charge during warranty period.
2. The contractor shall rectify defects developed in the system within Warranty period promptly. **The procedure to rectify the complaint/service to be provided during warrantee period** is as follows:

During the warrantee period, the firm shall ensure proper functioning of the systems and complaint, if any, forwarded to the supplier against the system, will have to be attended within 7 days of forwarding such complaints. The procedure to rectify the complaints shall be as under:

- a) The notice through E-mail/hard copy to rectify the complaints shall be issued by the MMO SCOPE/User to the contractor. This shall be followed by two reminders on 7 days' intervals each.
- b) Rs.100 per day per system for systems will be imposed from the expiry of 21 days & same will be deducted from the payment due to the supplier / out of the Performance Security Deposit/ bank Guarantee. The firm if failed to repair/replace the defective system, amount equivalent to the job will be deducted from the bill.

APPROVED MAKES

1.	SPV MODULE	TITAN ENERGY/VIKRAM/TATA/CEL/BHEL
2.	PANEL JUNCTION BOX	HANSEL/RITALL
3.	HYBRID INVERTER	ENERTECH/ CONSUL NEOWATT/ SU-KAM/ LUMINOUS
4.	CABLES	SKYTONE,HAVELLS,POLYCAB,KEI,POLYCAB
5.	ENERGY METER	L&T, ABB, SECURE METER
6.	PUMP FOR MODULE CLEANING	CGL, KIRLOSKAR, HAVELLS
7.	MCB/MCCB(50kA,Ics=100%Icu)	L&T, ABB, SCHNEIDER
8.	DATA MONITORING SYSTEM	As per Specification
9.	ANCHOR & FASTNER	HILTI
10.	Battery	LUMINOUS , EXIDE , AMARON.
11.	Current Transformer	KAPPA,AE.
12.	Indication Lamp	L&T,BCE,ABB.
13.	Gland	COMET,JAINSON
14.	Thimble/Lugs	DOWELLS, JAINSON
15.	Control Wiring (2.5Sqmm) FRLS	HAVELLS,POLYCAB
16.	Ammeter, Voltmeter	L&T, SCHNIDER,ABB,NEPTUNE