



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

(E-PROCUREMENT TENDER NOTICE)

TENDER SCHEDULE

FOR

DESIGN, SUPPLY, INSTALLATION & COMMISSIONING OF 1 KWP OFF-GRID SOLAR PV SYSTEMS WITH 6 NO'S OF 30W LED INDOOR LIGHTS, 4 NO'S OF LED STREET LIGHTS AT 200 NO'S TWD ASHRAM SCHOOLS IN (4) ITDA AREAS IN TELANGANA STATE, INCLUDING THE CMC FOR A PERIOD OF 5 YEARS

TENDER NOTICE. No. TSREDCO/SE/SPV/1kWp-OfG/ASHRAM SCHOOLS-TWD/2020-21 DATED 20.01.2021

CLOSING DATE: 08.02.2021 AT 3.00 PM



**TELANGANA STATE RENEWABLE ENERGY DEVELOPMENT CORPORATION LTD
(TSREDCO)**

Corporate Office: D. No. 6-2-910, Visvesvaraya Bhavan,
The Institution of Engineers Building, Khairatabad, Hyderabad - 500 004.

Telangana State, India

PHONE: 040-23201502, 23201503, FAX : 040-23201504

E-mail : info@tsredco.telangana.gov.in, se@tsredco.telangana.gov.in

Web site: tsredco.telangana.gov.in



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

| Contents Description | Page No. |
|---|-----------------|
| Website advertisement | 3 |
| Section A – Invitation for Bids | 4-5 |
| Section B - Statement of important limits and values of bid | 6-7 |
| Section C -Technical Specifications | 8-16 |
| Scope of Work | 17-19 |
| Section D -Tender Schedule | 20-33 |
| Section E- Bidder Information | 34-35 |
| Section F - Financial Bid | 36 |
| Check List | 37 |
| List of TWD Ashram School Locations | 38-40 |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

Website advertisement

Tender Notice



TELANGANA STATE RENEWABLE ENERGY DEVELOPMENT CORPORATION LTD - (TSREDCO)

Corporate Office: D. No. 6-2-910, Visvesvaraya Bhavan, The Institution of Engineers Building, Khairatabad, Hyderabad, 500 004. Telangana State PHONE: 040-23201502, 23201503, FAX : 040-23201504

Online tenders are hereby invited from interested and eligible bidders for “**Design, Supply, Installation & Commissioning of 1 kWp Off-Grid Solar PV systems with 6 No’s of 30W LED Indoor lights, 4 No’s of LED street lights at 200 No’s TWD Ashram Schools in (4) ITDA Areas in Telangana State, including the CMC for a period of 5 Years**”.

Interested bidders can download the bids online from 20.01.2021 and submit the same, from 20.01.2021 to 08.02.2021 till 03:00PM through www.tender.telangana.gov.in. For further details please visit our website: <https://tsredco.telangana.gov.in>

Date:20.01.2021

VC & MD,
TS REDCO



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

SECTION – A

INVITATION FOR BIDS

TSREDCO invites sealed tenders comprising Pre-qualification, technical bid and price bid from the eligible bidders for "Design, supply, installation & commissioning of 1 kWp Off-Grid Solar PV systems with 6 No's of 30W LED Indoor lights, 4 No's of LED street lights at 200 No's TWD Ashram Schools in (4) ITDA Areas in Telangana State, including the CMC for a period of 5 Years.

Time schedule of various tender related events

| | |
|--|---|
| Bid Document fee (Non refundable) | Rs. 29,500/- incl. 18% GST (to be paid Online from any Scheduled Bank to M/s TSREDCO, Account no: 30242010095314, Canara Bank, Mukramjahi Raod, Hyderabad). The copy of acknowledgement is to be submitted to TSREDCO. |
| BID BOND (EMD) | Bid Bond (EMD) for Rs.4,00,000/-(Four Lakhs only) to be paid Online from any Scheduled Bank to M/s TSREDCO, Account no: 30242010095314, Canara Bank, Mukramjahi Raod, Hyderabad). The copy of acknowledgement is to be submitted to TSREDCO (or) BG in favor of TSREDCO. Firms claiming Exemptions for BID SECURITY DEPOSIT shall submit Certificate from NSIC/ MSME. |
| Bid Documents Downloading Start date | 20.01.2021 |
| Bid Document Downloading End Date | 08.02.2021 till 03.00 PM |
| Last date for uploading of online documents | 08.02.2021 till 03.30 PM |
| Last date for submission of Hard copies of documents uploaded online | 08.02.2021 till 05.00 PM at D.No.6-2-910, Visvesvaraya Bhavan, The Institution of Engineers Building, Khairatabad, Hyderabad, 500 004. Telangana State, India |
| Pre-qualification & Technical Bid opening date/time | 09.02.2021 at 11:00 AM. |
| Price Bid opening date/time | 11.02.2021 at 04:00 PM |
| Contact person | General Manager, TSREDCO, Hyderabad |
| Reference No | TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21 dated 20.01.2021. |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

CLARIFICATIONS:

- i. Queries if any, can be made through e-mail only on se@tsredco.telangana.gov.in on or before 08.02.2021 Queries received via any mode other than e-mail id mentioned above will not be entertained. The queries should only be sent in following format on the official letter head of the company.

| S.No. | Page No. (Tender Ref.) | Clause (Tender Ref.) | Description (Tender Ref.) | Query |
|--------------|---------------------------------------|-------------------------------------|--|--------------|
| | | | | |

- ii. The addendum/corrigendum if any shall be published on TSREDCO's website i.e. tsredco.telangana.gov.in
- iii. The Bidders are requested to submit the bids after issue of clarifications duly considering the changes made if any. Bidders are totally responsible for incorporating/complying the changes/ amendments issued if any in their bid.

Sd/-xxxx
VC & MD
TSREDCO



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

SECTION-B

STATEMENT OF IMPORTANT LIMITS/VALUES RELATED TO BID

| Item | Description |
|--------------------------------------|---|
| Bid Document fee (Non refundable) | Rs. 29,500/- incl. 18% GST (to be paid Online from any Scheduled Bank to M/s TSREDCO, Account no: 30242010095314, Canara Bank, Mukramjahi Raod, Hyderabad). The copy of acknowledgement is to be submitted to TSREDCO. |
| Name of the Work | "Design, supply, installation & commissioning of 1 kWp Off-Grid Solar PV systems with 6 No's of 30W LED Indoor lights, 4 No's of LED street lights at 200 No's TWD Ashram Schools in (4) ITDA Areas in Telangana State, including the CMC for a period of 5 Years. |
| Minimum Eligibility Criteria | 1. Valid Registered SPV Suppliers/ Manufacturers/ System Integrators empanelled with TSREDCO with requisite experience of Supply, Installation and Commissioning of Grid Connected Solar Projects least minimum 100KWp cumulative capacity in field of Off Grid OR Grid Connected Solar PV systems (with Mandatory of 50KW off-grid experience) in any one (1) year from the last 3 Years (i.e. FY 2017-18, 2018-19 and 2019-20). 2. Bidder should have annual turnover of Rs.2.00 Cr. In any one (1) Financial Year during the last three financial years i.e. 2017-18, 2018-19 and 2019-20 (Certificate from CA is to be furnished). |
| EMD (Bid Bound)/Bid Security Deposit | Bid Bond (EMD) for Rs.4,00,000/-(Four Lakhs only) to be paid Online from any Nationalized Bank/Scheduled Bank to M/s TSREDCO, Account no: 30242010095314, Canara Bank, Mukramjahi Road, Hyderabad). The copy of acknowledgement is to be submitted to TSREDCO (or) BG in favor of TSREDCO. Firms claiming Exemptions for BID SECURITY DEPOSIT shall submit Certificate from NSIC/ MSME.. |
| Performance security value | Performance security deposit of 10% on Project Cost is to be submitted at the time of work allotment. Guarantee @ 10% on the total project cost with quoted price. This Performance Guarantee amount shall be paid Online from any Nationalized Bank/Scheduled Bank to M/s TSREDCO, Account no: 30242010095314, Canara Bank, Mukramjahi Road, Hyderabad). The copy of |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

| | |
|--|--|
| | acknowledgement is to be submitted to TSREDCO OR Bank Guarantee on any Nationalized Bank/Scheduled Bank in favour of TSREDCO valid for five years period. The amount / BG the same will be returned after completion of Performance period i.e., 5 years from date of commissioning of plant. |
| Bid Validity Period & offer for acceptance | 90 days from the date of opening of commercial bid |

Note:

1. The Tender document can be downloaded from <http://tsredco.telangana.gov.in> and the cost of tender document of Rs. 29,500/- inclusive of 18% GST should be paid online to M/s TSREDCO account no. 30242010095314, Canara Bank, Mukramjahi Road, Hyderabad and the copy of acknowledgement/payment receipt is to be inserted in the technical bid of the tender document.
2. In respect of Minimum eligibility criteria (above), relevant attested copies of approvals of MNRE/TSREDCO shall be submitted along with Technical bid.
3. All relevant required documents along with evidences are to be inserted in technical bid, and only quoted rates (as per Format enclosed) is to be inserted in the financial bid.
4. Financial bid will be opened of those bidders who would duly qualify in the technical bid.
5. Industries exempted from payment of EMD shall enclose duly attested Photostat copy of their Registration Certificate showing the **materials (Solar)** they are permitted to manufacture/to do rendering services and the period of validity of the certificate as proof of eligibility for exemption from payment of EMD/Bid Security.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

SECTION – C

(Technical specifications)

A. TECHNICAL SPECIFICATIONS FOR SOLAR OFF GRID SPV SYSTEMS

1. INTRODUCTION:

- ❖ **The suppliers have to follow all the conditions as per MNRE norms as follows.**
 - **The Technical specifications/ guidelines are as per the terms and conditions stipulated in Administrative approval of the MNRE Vide Lr. dated 26.05.2014 and F. No. 32/648/2017-SPV Division, Dt.07.08.2018 and as amended time to time.**
 - **Lr. No. 41/06/2015-16/PVSE, Dt.31.07.2017**
 - **Lr. No. 41/06/2015-16/PVSE, Dt.19.04.2017**
 - **Lr. No. 41/06/2015-16/PVSE, Dt.02.01.2017**
 - **Lr. No. 5/23/2009 –P&C Part-III), Dt.18.11.2014 for capacity of battery backup.**
 - **Lr. No. 318/38/2018-GCRT, Date: 15 June 2018**
 - **Technical specifications for the Financial Year 2016-17 mentioned at <https://mnre.gov.in/Solar/Standard,Specification> & Benchmark cost/ Specification/ Technical Specifications for Solar photovoltaic lighting systems and power packs**
- ❖ **The suppliers have to use MNRE empanelled inverters & Batteries only as per MNRE Specifications.**
- ❖ **The suppliers have to submit the MNRE approved the above product test reports and On completion of the work, the contractor shall submit all documents in formats of MNRE as per Lr. No. 32/648/2017-SPV Division, Dated: 08 October 2018 along with any necessary documents in 3 sets to TSREDCO.(The formats are available in MNRE web site).**
- ❖ **The suppliers have to follow all the above conditions and maintain minimum system configurations for the 1 kWp SPV off grid systems as per MNRE norms as follows.**



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- ❖ **System Configurations:** Bidders has to quote for the following system configuration: 1 kWp these systems shall be used for

| System capacity | 1KWp |
|---|---|
| Total Power output of panel(s) under STC | shall not be less than 1,000Wp |
| Type of PV Module | 72 cells – Indigenous Crystalline silicon approved by MNRE |
| Minimum rated power of each module | $\geq 250\text{Wp}$ |
| Solar Off-Grid Inverter minimum KVA | 24/12 V, 1.2 KVA |
| Battery Bank | 12V/150 AH - 4 No's - C/10 Rated ; Lead Acid Tubular Gel Batteries |
| Structure& other BOS | MS Galvanized structure of 50X50X5mm angle iron as per MNRE specs to be used |
| Cables | Reputed brand having IEC 60189 IS 694/ IS 1554 of 4Sqmm on DC side and 2.5sqmm on AC side must be used Energy Meter, ACDB, DCDB, separate earthing has to be provided, including the AMC for a period of 5Years |
| Wiring | The (AC & DC) Internal and Electrical output wiring, installation and connection to the loads or any in the scope of supplier only as per MNRE / IEC / BIS Standards/ Specifications |

2. PV MODULES:

- Indigenously manufactured PV modules should be used.
- The PV modules should be made up of crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II / BIS 14286 from an NABL or IECQ accredited Laboratory.
- The module efficiency should not be less than 14%.
- The terminal box on the module should have a provision for opening, for replacing the cable, if required.
- There should be a Name Plate fixed inside the module which will give:



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- (i) Name of the Manufacturer or Distinctive Logo.
 - (ii) Model Number
 - (iii) Serial Number
 - (iv) Year of manufacture
 - (v) TSREDCO Logo with text
- f. A distinctive serial number starting with NSM will be engraved on the frame of the module or screen printed on the tedlar sheet of the module.

3. BATTERY

- a. The battery should be Gel Type.
- b. The battery will have a minimum rating of 12V at C/10 discharge rate
- c. 75 % of the rated capacity of the battery should be between fully charged & load cut off conditions.
- d. Battery should conform to the latest BIS/ International standards.
- e. The batteries makes should be empanelled with MNRE.

4. ELECTRONICS

- a. Electronics should operate at 12 / 24 V and should have adequate temperature compensation arrangement for proper charging of the battery throughout the year.
- b. Inverter should be with “THD” less than 5% and Efficiency more than 90 %.
- c. Necessary lengths of wires / cables, switches and fuses should be provided.
- d. The system should have separate ports for connecting each load along with a charging port for mobile and laptop.
- e. The idle current i.e. when there is no load (& inverter is switched OFF, in case of A.C. Systems) and no display, it should be less **than 150 mA**.
- f. The voltage drop from module terminals to the battery terminals should not exceed 1.0 volts including the dropage across the diode and the cable when measured at maximum charging current.
- g. The PCB containing the electronics should be capable of solder free installation and replacement.
- h. Necessary lengths of wires/cables, switches suitable for DC use and fuses should be provided. The inverter output AC voltage should not change with the decreased battery voltage in the operating voltage range of the batter.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OFG/Ashram Schools-TWD/2020-21

5. ELECTRONIC PROTECTIONS

- a. Adequate protection is to be incorporated under “No Load” condition, e.g. when the lamps and other loads are removed and the system is switched ON.
- b. The system should have protection against battery overcharge, deep discharge condition.
- c. Load reconnect should be provided at 90 % of the battery capacity status.
- d. Adequate protection should be provided against battery reverse polarity.
- e. Fuses should be provided to protect against short circuit conditions.
- f. Protection for reverse flow of current through the PV module(s) should be provided.

6. MECHANICAL COMPONENTS:

- a. Corrosion resistant frame structure should be provided to hold the SPV module.
- b. The frame structure should have provision to adjust its angle of inclination to the horizontal, so that it can be installed at the specified tilt angle.
- c. Light source should be either for wall mounted or ceiling mounted or can be hung from the ceiling in a stable manner, as per site requirements.
- d. A vented plastic/ wooden/ metallic box with acid proof corrosion resistant paint for housing the storage battery indoors should be provided.

7. INDICATORS:

- a. The system should have two indicators, green and red.
- b. The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.
- c. Red indicator should indicate the battery “Load Cut Off” condition.

8. QUALITY AND WARRANTY:

- a. The **Solar home lighting system will be warranted for a period of five years from the date of supply.**
- b. The **PV module(s) will be warranted for a minimum period of 25 years from the date of supply.** PV modules used in Solar Home Lighting System must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty five (25) years.
- c. The battery should be warranted for a period of **5 years.**



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- d. The Warranty Card to be supplied with the system must contain the details of the system. The manufacturers can also provide additional information about the system and conditions of warranty as necessary.
- e. During the Warrantee/ Guarantee period, MNRE / TSREDCO / users will have all the rights to cross check the performance of the Solar PV Power Plant. TSREDCO may carry out the frequent inspections of the Solar PV Power Plant installed and randomly pick up its components to get them tested at Govt. / MNRE approved any test center. If during such tests any part is not found as per the specified technical parameters, TSREDCO will take the necessary action. The decision of TSREDCO in this regard will be final and binding on the tenderer.

9. OPERATION and MAINTENANCE MANUAL:

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the Solar Home Lighting System. The following minimum details must be provided in the Manual:

- a. Basic principles of Photovoltaics.
- b. A small write-up (with a block diagram) on Solar Home Lighting System - its components, PV module, battery, electronics and luminaire and expected performance.
- c. Significance of indicators.
- d. Type, Model number, voltage & capacity of the battery, used in the system.
- e. The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of W-LEDs used in the lighting system must be indicated in the manual.
- f. Clear instructions about mounting of PV module(s).
- g. Clear instructions on regular maintenance and trouble shooting of the Solar Home Lighting System.
- h. DO's and DONT's.
- i. Name and address of the contact person for repair and maintenance.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

10. The BoS items / components of the Solar PV Power Plants/ systems must conform to the latest edition of IEC/ equivalent BIS Standards as specified below:

| BoS item/component | Applicable IEC/equivalent BIS Standard | |
|--|--|--|
| | Standard Description | Standard Number |
| Power Conditioners/ Inverters* | Efficiency Measurements Environmental Testing | IEC 61683 IEC 60068 2 (6,21,217,30,778) |
| Charge controller/ MPPT units* | Design Qualification Environmental Testing | IEC 62093 IEC 60068 2 (6,21,27,30,75,78) |
| Cables | General Test and Measuring Methods PVC insulated cables for working Voltages up to and including 1100 V-Do-, UV resistant for outdoor installation | IEC 60189 IS 694/ IS 1554 IS/IEC 69947 |
| Switches/Circuit Breakers / Connectors | General Requirements Connectors- safety | IS/IEC 60947 part I,II,III EN 50521 |
| Junction Boxes/ Enclosures | General Requirements | IP 65 IP 21 IEC 62208 |
| SPV System Design | PV Stand-alone System design verification | IEC 62124 |
| Installation Practices | Elect. installation of building requirements for SPV power supply systems | IEC 60364-7-712 |

** BoS Must additionally conform to the relevant national/international Electrical Safety Standards.

11. Test Certificates and Reports to be Furnished:

Test Certificates / Reports from IECQ / NABL accredited laboratory for relevant IEC / equivalent BIS standard for quoted components shall be furnished. Type Test Certificates shall be provided for the solar modules and the solar off grid inverter and batteries to provide evidence of empanelment with standards as specified by Ministry of New and Renewable Energy (MNRE). TSREDCO reserves the right to ask for additional test certificates or (random) tests to establish compliance with the specified standards.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

B. TECHNICAL SPECIFICATIONS FOR LED STREET LIGHTS: AC LED STREET LIGHT CAPACITY IN WATTAGE(W): 30 W

| S. No | Description of work |
|--------------|--|
| 1 | <p>Supply of LED Street Light and Fixtures for Telangana – including comprehensive on-site warranty and maintenance for 5 years [as per Technical Specifications defined in Scope of Work]</p> <p>Street light shall include:</p> <ul style="list-style-type: none">a) Arm pipe: 90 Cm length. (Along with pole – 30 cm Extension towards road 60 cm). inner dia 2.54 cm, 5 mm thick, coated with primary and secondary paints. Arm angle 45 Degrees.b) 50 mm X 6 mm MS flats – 4 nos for fixing the arm pipe to the electrical pole.c) 5/8 inch size GI nut boltsd) Connecting cable 1 sq.mm cable multi stand A1 cable for a length of 1.5 mts up to streetlight wiree) Photo cell/ LDR sensor on/off switchf) GI pole 6 mts height |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

C. TECHNICAL SPECIFICATIONS OF LED INDOOR LIGHTS



| S. No. | Description | Specifications |
|---------------|---|--|
| 1 | Dimensions | 595 mm (L) X 595 mm (W) |
| 2 | Power Consumption including driver loss | 30 W |
| 3 | Luminous Efficacy of the Luminaire | Above 100 lm/w |
| 4 | Color | 5500°K to 6000°K |
| 5 | Lamp Type | Discrete LED |
| 6 | Fixture Material | Powder coated CRCA Sheet |
| 7 | Input Voltage Range & Frequency | 140 – 280 VAC, 50 Hz Auto cut off beyond voltage range |
| 8 | Power Factor | Greater than 0.95 |
| 9 | THD | <10% |
| 10 | LED Beam Angle | 100 – 120 deg. |
| 11 | Mounting Type | Recess Ceiling |
| 12 | CRI | Greater than 80 |
| 13 | Rated lamp life | Min. 50,000 Hrs. |
| 14 | Heat Dissipation | Suitable arrangement having low LED driving current |
| 15 | IP Rating | IP 20 |
| 16 | Protection | 2.5kV Voltage surge protection, Short Circuit Protection |
| 17 | Driver | Constant current |
| 18 | make of driver | Fulam / Philips /Halonix /equivalent |
| 19 | LED Chip | Nichia / Cree / Osram /Lumilied / equivalent |
| 20 | Warranty | Five years (whole) |
| 21 | Diffuser | Glare free full opal Diffuser |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OFG/Ashram Schools-TWD/2020-21

NOTE:

- All Tests have to be confirmed and appropriate TEST REPORTS from NABL Accredited laboratory which have to be submitted in Envelope I of Bid. Non-submission of the test report before the opening of the tender will disqualify the bidder in the technical Bid itself.
- Additionally following LED related reports shall be provided by manufacturer for all the above models.
 - A. LM79 and LM80/IS: 16106 & TM-21
 - B. Photo biological Report as per IEC 62471 & IEC/TR 62778 – Ed. 1.0 Test report
 - C. LED Chip (Efficacy, CCT and CRI) test report.
- TSREDCO is free to draw samples from the supplied quantity and subject the same to test in a NABL Accredited Lab. The decision of TSREDCO on the same shall be binding on the vendor. Failure of the sample will invite strict penalty and disqualify the vendor from future tenders also.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OFG/Ashram Schools-TWD/2020-21

SCOPE OF WORKS AND SERVICES

SCOPE OF WORK

The work shall include "Design, supply, installation & commissioning 1 kWp Off-Grid Solar PV systems with 6 No's of 30W LED Indoor lights, 4 No's of LED street lights at 200 No's TWD Ashram Schools in (4) ITDA Areas in Telangana State," on turnkey basis in accordance with the technical specifications, including the CMC for a period of 5 Years.

The details of Solar PV Power Plants to be installed are as under:

| S. No | Particulars | Qty | Units |
|--------------|--|------------|--------------|
| 1 | a) Supply & installation of 30W LED Indoor lights inclusive of Transportation, loading & unloading charges and Internal wiring for 30W LED Indoor lights | 6 | Nos |
| 2 | a) Supply & installation of 30W LED Street Lights inclusive of Transportation cost including loading and unloading, External wiring for poles of 30W LED Street lights with MCB Control with rated cables. | 4 | Nos |
| | b) Supply and erection of 6.0 m long GI poles as per specification. | | |
| | c) Earth work excavation for foundation and depositing on bank for all lifts and with an initial lead of 10m incl. all operational, incidental, labour charges such as shoring, sheeting, planking, strutting, etc., complete for finished item of work including. | | |
| | d) Plain Cement concrete (1:4:8) using 40mm metal with concrete mixture. All work up to Plinth level including cost & conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc, to site and including Seigniorate changes. | | |
| 3 | Supply, Installation, Testing and Commissioning of 1kWp Off grid SPV Power Pack with five years CMC | 1 | No |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

Scope of works shall include:

- A. Solar PV modules including mounting frames, Mounting structures, foundation bolts and nuts for holding structures and module inter connection, Array Junction boxes / String combiner Box with surge protection and monitoring system including output electrical wiring works for connecting to the loads. The entire work shall be performed on turnkey basis. All the works related to the proper installation and functioning of the system shall have to be carried out by the contractor in the prices offered by him.
- B. **Required Internal wiring to energize the proposed load shall have to be done by the contractor. All the wiring shall have to be done in concealed conduits and this works includes quoted rate.**
- C. All necessary electrical wiring from electrical distribution box up to PCU of Solar PV Power Plant and back from PCU to distribution box shall have to be provided by the contractor.
- D. Appropriate Cabinets for battery banks, with the provision of acid proof racks for batteries should be provided by the contractor.
- E. The complete Solar PV Power Plant including indoor and outdoor fittings shall be warranted by the contractor against any manufacturing/ design/ installation defects for a minimum period of 5 years from the date of installation.
- F. Required earthing pits on AC & DC sides and lightning arrestors should be provided by the contractor.
- G. PV modules used in Solar PV Power Plant shall be warranted by the contractor for their output peak watt capacity, which should not be less than 90% at the end of 15 years and 80% at the end of 25 years.
- H. The contractor will make all necessary arrangements for satisfactory operation, maintenance and performance of the Power Plant during 5 year's CMC period.
- I. Rectification of all the defects developed in the Solar PV Power Plant during CMC period shall have to be done by the contractor promptly, at the most within 3 days from the date of receipt of compliant.
- J. CMC will include rectification /replacement of all the defective and consumable components/items including batteries. During CMC period, all the arrangements for keeping the Solar PV Power Plant functional shall be the sole responsibility of the contractor.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- K. After completion of the proposed works, clearances of all temporary works/ materials shall be the sole responsibility of the contractor and this shall be removed immediately after the requirement of such temporary work is completed.
- L. All the non functional parts/ materials/ items replaced during the CMC period shall be the property of the contractor.
- M. The contractor will conduct on-site training of the purchaser's/ user's personnel regarding the operation, maintenance and repairs of the Solar PV Power Plant.
- N. Necessary arrangements for storage of batteries, Earthing pits, lightning arrestors & PCU of Solar PV Power Plant as per requirement shall be done by user agency.
- O. During CMC period, the contractor shall have to submit quarterly performance report from user agency regarding functionality of the system.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

SECTION – D

TENDER SCHEDULE

1. PREAMBLE:

The scope of work for the bidder include complete 1 kWp Off-Grid Solar PV systems with 6 No's of 30W LED Indoor lights, 4 No's of LED street lights at 200 No's TWD Ashram Schools in (4) ITDA Areas in Telangana State " including operation and maintenance (O&M) of the project for a period of Five years after commissioning of above locations in Telangana State through e-procurement platform (i.e. www.tender.telangana.gov.in).

2. INCOME TAX:

During the course of the contract period, deduction of income tax and surcharge at source shall be made at the prevailing rate issued by Income Tax Department from time to time on the gross amount of each bill.

3. RATES , TAXES AND DUTIES:

All the rates in the tender shall be **inclusive of all statutory compliances** like PF, ESI, Service Tax, GST, etc.

4. PLACE OF WORK AND VISIT TO SITE:

Intending tenders shall visit the Site/ Campus to acquaint with local site conditions, nature and requirement of work, present conditions of premises/fittings/fixtures, etc., before start of the work.

5. ELIGIBILITY CRITERIA:

- a. Valid Registered SPV Suppliers/ Manufacturers/ System Integrators with TSREDCO.
- b. Bidder should have annual of Rs.2.00 Cr. In any one (1) Financial Year during the last three financial years i.e. 2017-18, 2018-19 and 2019-20 (Certificate from CA is to be furnished).
- c. Bidder should have experience at least minimum **100KWp cumulative capacity in field of Off & ON Grid** Solar PV systems (**with Mandatory of 50KW off-grid experience**) in any one (1) year from the last 3 Years (i.e. FY 2017-18, 2018-19 and 2019-20).
- d. Experience certificate along with Performance Certificate from beneficiary, which is not later than 6 months from the submission of Tender.

6. BID PRICE:

- a. The price should be quoted in Indian Rupees in online, failing which the bid would be rejected. The price shall be written both in figures & words in the prescribed offer form.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- b. The rates quoted by the bidder shall be fixed for the duration of the contract period and shall not be subject to adjustment on any account except on account of any statutory changes made to the tax structure by the government.
- c. If there is a discrepancy between amount in words and figures, the amount in the words will prevail.
- d. Incomplete and/or conditional bids shall be liable to rejection. Prices should be quoted as per the format of price bid.
- e. The (AC & DC) Internal and Electrical output wiring, installation and connection to the loads or any in the scope of supplier only and costs are included in the quoted price.

7. EARNEST MONEY DEPOSIT / SECURITY DEPOSIT:

- a. The tender should accompany with Earnest Money Deposit (EMD) for **Rs.4,00,000/-** to be paid Online from any Nationalized/Scheduled Bank to M/s TSREDCO, Account no: 30242010095314, Canara Bank, Mukramjahi Road, Hyderabad). The copy of acknowledgement is to be submitted to TSREDCO (or) BG in favor of TSREDCO.
- b. Firms claiming Exemptions for Bid Security shall submit Certificate from NSIC/ MSME/SSI.
- c. The EMD will be returned to unsuccessful tender, whereas in the case of successful tenderers, it will be retained.
- d. The successful bidder will have to conclude agreement.
- e. **Security Deposit:** 10% of work value as to be paid as a Security Deposit to be paid Online from any Nationalized Bank/Scheduled Bank to M/s TSREDCO, Account no: 30242010095314, Canara Bank, Mukramjahi Road, Hyderabad. The copy of acknowledgement is to be submitted to TSREDCO (or) Bank Guarantee on any Nationalized Bank/Scheduled Bank in favour of TSREDCO valid for five years period at the time of entering into work agreement. The amount / BG to be refund after 5years warranty period.
- f. The Security Deposit /Bank Guarantee of successful tenderer will be retained for the period of contract in force and will be returned after expiry of the contract period, after deducting the outstanding liabilities if any. The Security Deposit/Bank Guarantee shall not carry any interest.

8. INSTRUCTIONS TO BIDDERS:

- a. Tenders with over writings, alterations etc., will not be admitted unless they are attested by the bidder. Where there is a discrepancy between the rupees in figures and words, the price, which is least of the two, will govern.
- b. BID should be strictly in conformity with the Terms and Conditions mentioned in the tender schedule.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- c. Bidders are expected to examine all the terms and instructions mentioned in the tender schedule and prepare their proposals accordingly. Failure to provide all requisite information will be at the bidders' own risk and may result in the rejection of the tender.
- d. All assertions made in connection with the tender are to be supported / substantiated by relevant documents. The Vice Chairman and Managing Director, TS REDCO, Hyderabad reserves the right to verify the credentials of the bidder as per the eligibility criteria.
- e. The Vice Chairman and Managing Director, TSREDCO, Hyderabad, will notify the bidder whose tender has been accepted.
- f. The Vice Chairman and Managing Director, TSREDCO, Hyderabad, reserves the right to issue instructions / modifications at any point of time before award of contract.

9. EVALUATION PROCEDURE:

For short listing of agency the following criteria shall be applied. For this purpose agency shall submit proof documents along with the tender and the agency not confirming to any of these parameters will not qualify for short listing.

- a. The Tenders will be opened as per the schedule by The Vice Chairman and Managing Director, TSREDCO, Hyderabad or his authorized representative in the presence of the bidders or their authorized representative who may be present at that time.
- b. The Technical Bids consisting of the documents related to Eligibility criteria will be opened first. The tenders will be evaluated so as to ascertain the capability of the bidders to provide the services for the period mentioned above and also to assess whether the bidder satisfies the eligibility criteria.
- c. The Financial/Price Bids of only those bidders, who have fulfilled the eligibility criteria above, will be opened online and the Price Bid of the bidders who do not fulfill the eligibility criteria will not be opened and their Tender shall stand rejected.
- d. Any claims or disputes raised by the unsuccessful bidders in respect of selection process and non-allotment of award will have no legal validity and will not be enforceable against The Vice Chairman and Managing Director, TS REDCO, Hyderabad. No further correspondence will be entertained regarding the disqualification.
- e. The Vice Chairman and Managing Director, TS REDCO, Hyderabad, reserves the right to accept or reject any / or all the tenders without assigning any reasons whatsoever. The Vice Chairman and Managing Director, TS REDCO, Hyderabad also reserves the right to cancel the selection process for award of the contract at any time. The decision of The Vice Chairman and Managing Director, TS REDCO, Hyderabad is final and binding.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

10. SUCCESSFUL BIDDER(S) SELECTION

- a. Bids qualifying in Clause 5 shall only be evaluated in this stage.
- b. Letter(s) of Allocation (LOA): The Letter(s) of Allocation (LOA) shall be issued to all such Successful Bidders(s) selected as per the provisions of terms and conditions.
- c. Each Successful Bidder shall acknowledge the LOA and return duplicate copy with signature & stamp of the authorized signatory of the Successful Bidder to the TSREDCO within Seven (07) days of issue of LOA.
- d. The maximum up to 40% capacity will be allotted to L1 Bidder.
- e. Subsequent L2, L3 & L4 bidders will be given up to 20% capacity each on the total allotment given and will be allotted availability of the projects on the bid / quoted category wise if matches L1 rates only.
- f. If any of the lowest bidders i.e, L2, L3 & L4 doesn't match with L1 price then subsequent qualified bidders will be given priority for empanelment.
- g. The empanelment will be given to 4 bidders who are qualified in this tender and accepting the L1 rate only.
- h. Allocation of respective capacities, locations will be decided by the VC & Managing Director/ TSREDCO
- i. The TSREDCO at its own discretion, has the right to reject any or all the Bids without assigning any reason whatsoever, at its sole discretion.
- j. If the Bidder fails to commission the project within specified time, penalty on per day basis calculated for the Performance Security on a 3 month's period would be levied. After 3 months, the project will get cancelled and the total PBG/SD would be forfeited.

11. PERFORMANCE SECURITY:

- a. Within 7 days of receipt of the Letter of Acceptance, the Successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 10% of the Contract price. Bank draft, in favour of **TSREDCO payable at Hyderabad** drawn on any scheduled Bank/Nationalized Bank.
- b. If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued by a Nationalized Bank/Scheduled Bank and acceptable to the Employer.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- c. Failure of the successful Bidder to comply with the requirements of shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.

12. PROJECT COST:

- a. The Project cost shall include all the costs related to above Scope of Work. Bidder shall quote for the entire facilities on a “single responsibility” basis such that the total Bid Price covers all the obligations mentioned in the Bidding Documents in respect of Design, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for a period of 5 years, goods and services including spares required if any during O&M period. The Bidder has to take all permits, approvals and licenses, Insurance etc., provide training and such other items and services required to complete the scope of work mentioned above.
- b. The project cost quoted is on turnkey basis and the bidder/bidders are responsible for the total Scope of Work described above.
- c. The project cost shall remain firm and fixed and shall be binding on the Successful Bidder till completion of work for payment of subsidy amount irrespective of his actual cost of execution of the project. No escalation will be granted on any reason whatsoever. The bidder shall not be entitled to claim any additional charges, even though it may be necessary to extend the completion period for any reasons whatsoever. The internal wiring to the loads on plant also included in the quoted price. No addition amount will be paid for internal wiring.
- d. The project cost shall be inclusive of all duties and taxes, **insurance etc** .The prices quoted by the firm shall be complete in all respect and no price variation /adjustment shall be payable.
- e. The operation & maintenance of Solar Photovoltaic Power Plant would include wear, tear, overhauling, machine breakdown, insurance, and replacement of defective modules, invertors / Power Conditioning Unit (PCU), spares, consumables & other parts for a period of 5 years.

13. INSURANCE:

- a. The Bidder shall be responsible and take an Insurance Policy for transit-cum-storage-cum-erection for all the materials to cover all risks and liabilities for supply of materials on site basis, storage of materials at site, erection, testing and commissioning. The bidder shall also take appropriate insurance during O&M period.
- b. The Bidder shall also take insurance for Third Party Liability covering loss of human life, engineers and workmen and also covering the risks of damage to the third party/material/equipment/properties during execution of the Contract. Before commencement of the work, the Bidder will ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

death arising out of the execution of the work or in carrying out the Contract. Liquidation, Death, Bankruptcy etc., shall be the responsibility of bidder.

14. WARRANTIES AND GUARANTEES:

The Bidder shall warrant that the goods supplied under this contract are new, unused, and as per **MNRE specifications** of the most recent or latest technology and incorporate all recent improvements in design and materials. The bidder shall provide system warranty covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of 5 years from the date of commissioning. The successful bidder has to transfer all the Guarantees /Warrantees of the different components to the Owner of the project. The responsibility of operation of Warranty and Guarantee clauses and Claims/ Settlement of issues arising out of said clauses shall be joint responsibility of the Successful bidder and the owner of the project and TSREDCO will not be responsible in any way for any claims whatsoever on account of the above.

15. TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP:

- a. The Design, engineering, manufacture, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/Indian Standards as detailed in the Section- C (Technical specifications) of the bid document. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE shall be used.
- b. The specifications of the components should meet the technical specifications mentioned in Section C.
- c. Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, manufacture, supply & performance or completeness of the project shall be provided by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant.

16. OPERATION & MAINTENANCE (O&M):

- a. The bidder shall be responsible for Operation and Maintenance of the Roof top Solar PV system of capacity installed for a period of 5 years, during which TSREDCO will monitor the project for effective performance in line with conditions specified elsewhere in the bid document. During this period, the bidder shall be responsible for supply of all spare parts as required from time to time for scheduled and preventive maintenance, major overhauling of the plant, replacement of defective modules, inverters, PCU's etc and maintaining log sheets for operation detail, deployment of staff for continuous operations and qualified engineer for supervision of O&M work, complaint logging & its attending.
- b. Quarterly RMS log sheets are to be submitted.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

17. PLANT PERFORMANCE EVALUATION:

The successful bidder shall be required to meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning and related Capacity Utilization Factor (CUF) as per the GHI levels of the location during the O&M period. PR should be shown minimum of 75% at the time of inspection for initial commissioning acceptance to qualify for release of payment. Minimum CUF of 15% should be maintained for a period of 5years. The bidder should send the periodic plant output details to TSREDCO for ensuring the CUF. The PR will be measured at Inverter output level during peak radiation conditions.

18. PROJECT INSPECTION:

The progress of the project above will be monitored by TSREDCO and the will be inspected for quality at any time during commissioning or after the completion of the project either by officer(s) from TSREDCO, beneficiary dept. or any authorized agency/ experts.

- a. TSREDCO reserves the right to do sample inspection checks for the projects commissioned by the Bidder.
- b. TSREDCO may also depute a technical person(s) for pre delivery inspection of SPV Modules and other components from its list of empanelled experts for inspection, Third party verification, monitoring of system installed to oversee, the implementation as per required standards and also to visit the manufactures facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required.

19. APPLICABLE LAW:

The Contract shall be interpreted in accordance with the laws of the Union of India.

20. SUCCESSORS AND ASSIGNS:

In case the TSREDCO or Successful bidder may undergo any merger or amalgamation or a scheme of arrangement or similar re-organization & this contract is assigned to any entity (ies) partly or wholly, the contract shall be binding mutatis mutandis upon the successor entities & shall continue to remain valid with respect to obligation of the successor entities.

21. SEVERABILITY:

It is stated that each paragraph, clause, sub-clause, schedule or annexure of this contract shall be deemed severable & in the event of the unenforceability of any paragraph, clause sub-clause, schedule or the remaining part of the paragraph, clause, sub-clause, schedule annexure & rest of the contract shall continue to be in full force & effect.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

22. COUNTER PARTS:

This contract may be executed in one or more counterparts, each of which shall be deemed an original & all of which collectively shall be deemed one of the same instrument.

23. RIGHTS & REMEDIES UNDER THE CONTRACT ONLY FOR THE PARTIES:

This contract is not intended & shall not be construed to confer on any person other than the TSREDCO & Successful bidder hereto, any rights and / or remedies herein.

24. CORRESPONDENCE:

Bidder requiring any clarification on bid documents may contact in writing or by Fax /E Mail.

| Sl. No | Designation | Contact Numbers | Email id |
|--------|------------------|-------------------|--|
| 1. | General Manager | 040 – 23201502/03 | info@tsredco.telangana.gov.in |
| 2. | Project Director | 040 – 23201502/03 | se@tsredco.telangana.gov.in |

25. TAX EXEMPTIONS:

Price bids are invited inclusive of Taxes and duties. However, Tax exemptions including certificates of any sort, if available may be dealt with the concerned Dep't of Govt. of India by the bidder. TSREDCO in no case will be responsible for providing any tax exemptions to the bidder.

26. REQUIREMENT OF APPROVALS ON MAKES OF THE COMPONENTS:

The modules should be manufactured in India only. Rest of the components can be procured from any source. However these items should meet the Technical specifications and standards mentioned as per MNRE norms.

27. PENALTY FOR DELAY IN PROJECT IMPLEMENTATION:

If the bidder fails to commission the allocated capacity within 30 to 45 days from date of issue of allocation letter, Penalty on per day basis calculated for the Performance Security on a 30 to 45 days period would be levied. After 45 days allocated capacity will get cancelled and the PBG amount pro-rata to non-commissioned capacity would be forfeited.

Example: If a project of 500 kW is delayed by 36 days then the LD will be levied as given below.

PENALTY = ((Performance Security)/60 days)*delayed days = (15,00,000 /60)*36



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

28. TIME OF COMPLETION OF ALLOCATED CAPACITY:

- a. Project completion shall be **120 days from the date of handing over of the site**. Failure of non-compliance of same shall lead to forfeiture of PBG in proportion to the capacity not commissioned.
- b. A Joint programme of execution of the Work will be prepared by the Engineer-in-Charge or its representative nominated for the purpose and Successful bidders based on priority requirement of this project. This programme will take into account the time of completion mentioned above and the time allowed for the priority Works by the Engineer-in-Charge.
- c. Monthly/Weekly implementation programme will; be drawn up by the Engineer-in-Charge jointly with the Successful bidder, based on availability of Work fronts as per Clause above. Successful bidder shall scrupulously adhere to these targets /programmes by deploying adequate personnel, tools and tackles and he shall also supply himself all materials of his scope of supply in good time to achieve the targets/programmes. In all matters concerning the extent of targets set out in the weekly and monthly programmes and the degree of achievements, the decision of the Engineer-in-Charge will be final and binding.

29. COMMISSIONING /COMPLETION CERTIFICATE:

- ❖ **On completion of the work, the contractor shall submit all documents in formats of MNRE as per Lr. No. 32/648/2017-SPV Division, Dated: 08 October 2018 along with any necessary documents in 3 sets to TSREDCO.(The formats are available in MNRE web site).**
- a. **Application for completion/commissioning certificate:**

When the Successful bidder fulfils his obligation under the Contract, he shall be eligible to apply for Completion Certificate. The Engineer-in-Charge of TSREDCO and beneficiary department officials shall normally issue to the Successful bidder the Completion Certificate within 15days after receiving any application therefore from the Successful bidder after verifying from the completion documents and satisfying himself that the Work has been completed in accordance with and as set out in Contract.
 - b. **Document SUBMISSION FOR ISSUE COMMISSIONING/COMPLETION CERTIFICATE**

For the purpose of above the following documents will be deemed to form the completion documents:
 - c. Checklist for inspection of Roof top SPV power plants as per MNRE/TSREDCO format.
 - d. Project completion report from successful bidder as per MNRE format.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- e. Project completion/satisfaction certificate from concern beneficiary department officials.

30. PAYMENT TERMS:

Payment will be settled as per the below:

- a. 70% of purchase order value will be settled on installation, commissioning and handing over of the systems to **Concerned Beneficiary Department** officials after joint inspection of TSREDCO, **Beneficiary Dept.** officials and the Supplier”.
- b. Contractor shall submit the performance and Warranty Certificates for a period of 5 Years for Inverter& other components and performance guaranty, warranty of SPV modules as per MNRE guidelines.
- c. 30% will be paid after 90 days of Successful performance of the system and joint inspection of **TSREDCO HO officials**, supplier along with Beneficiary, basing on satisfactory report of inspecting officer.
- d. The Invoices must be claimed with two different rates of GST i.e. 70% of Taxable Value to be claimed @5% GST Rate(present prevailing rate) for supply of Goods and 30% of Taxable value to be claimed at 18% GST Rate(present prevailing rate) for Installation work in single invoice.
- e. Income tax will be deducted by the TSREDCO from all payment made to the Contractor. This will be as per the Rules and Regulations in force and in accordance with the Income Tax Act prevailing from time to time.
- f. **TSREDCO ADMINISTRATIVE CHARGES @ 5% plus GST as applicable on the actual project completion cost shall be deducted at the time of release of first payment.**

31. FORCE MAJEURE:

- a. Notwithstanding the provisions of clauses contained in this BID document; the contractor shall not be liable to forfeit
- (a) Security deposit for delay and
- (b) Termination of contract; if he is unable to fulfill his obligation under this contract due to force majeure conditions.
- b. For purpose of this clause, "Force Majeure" means an event beyond the control of the contractor and not involving the contractor's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions and fright embargoes etc. Whether a “Force majeure” situation exists or



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

not, shall be decided by TSREDCO and its decision shall be final and binding on the contractor and all other concerned.

- c. In the event that the contractor is not able to perform his obligations under this contract on account of force majeure, he will be relieved of his obligations during the force majeure period. In the event that such force majeure extends beyond six months, TSREDCO has the right to terminate the contract in which case, the security deposit shall be refunded to him.
- d. If a force majeure situation arises, the contractor shall notify TSREDCO in writing promptly, not later than 14 days from the date such situation arises. The contractor shall notify TSREDCO not later than 3 days of cessation of force majeure conditions. After examining the cases, TSREDCO shall decide and grant suitable additional time for the completion of the work, if required.

32. TERMINATION:

The contract can be terminated

- a. by either without cause, after giving to the other party at least two calendar months' written notice thereof
- b. By the Employer, if the Tenderer/Service Provider fails to fulfill their tasks to the satisfaction of the Employer. Such failures constitute a breach of the Tenderer / Service Provider's obligations under contract, which are not remedied within 30 days from the date of giving of written notice requiring such breach to be remedied.

33. DISPUTES:

If any dispute of any kind whatsoever arises between TSREDCO and Successful bidder in connection with or arising out of the contract including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, the parties shall seek to resolve any such dispute or difference by mutual consent.

- a. If the parties fail to resolve, such a dispute or difference by mutual consent, within 45 days of its arising, then the dispute shall be referred by either party by giving notice to the other party in writing of its intention to refer to arbitration as hereafter provided regarding matter under dispute. No arbitration proceedings will commence unless such notice is given. Any dispute in respect of which a notice of intention to commence arbitration has been given in accordance with Sub Clause shall be finally settled by arbitration.
- b. In all other cases, any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- c. The TSREDCO and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within Thirty (30) days after the latter of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for third arbitrator which shall be the President, Institution of Engineers.
- d. If one party fails to appoint its arbitrator within thirty (30) days after the other party has named its arbitrator, the party which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.
- e. If for any reason an arbitrator is unable to perform its function, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws as mentioned in Clause 23 (Applicable Law) and a substitute shall be appointed in the same manner as the original arbitrator.
- f. Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue or arbitration shall be New Delhi.
- g. The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration panel, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.
- h. The arbitrator(s) shall give reasoned award.
- i. Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless they otherwise agree. Cost of arbitration shall be equally shared between the Successful bidder or Contractor and TSREDCO.

34. COST OF BIDDING:

The bidder shall bear all the costs associated with the preparation and submission of his offer, and the company will in no case be responsible or liable for those costs, under any conditions. The Bidder shall not be entitled to claim any costs, charges and expenses of and incidental to or incurred by him through or in connection with his submission of bid even though TSREDCO may elect to modify / withdraw the invitation of Bid.

35. RIGHT TO WITHDRAW THE BID AND TO REJECT ANY BID:

This BID may be withdrawn or cancelled by the TSREDCO at any time without assigning any reasons thereof. The TSREDCO further reserves the right, at its complete discretion, to reject any or all of the Bids without assigning any reasons whatsoever and without incurring any liability on any account.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

- a. The TSREDCO reserve the right to interpret the Bid submitted by the Bidder in accordance with the provisions of the BID and make its own judgment regarding the interpretation of the same. In this regard the TSREDCO shall have no liability towards any Bidder and no Bidder shall have any recourse to the TSREDCO with respect to the selection process. TSREDCO shall evaluate the Bids using the evaluation process specified in Section -I, at its sole discretion. TSREDCO decision in this regard shall be final and binding on the Bidders.
- b. TSREDCO reserves its right to vary, modify, revise, amend or change any of the terms and conditions of the Bid before submission. The decision regarding acceptance or rejection of bid by TSREDCO will be final.

36. ZERO DEVIATION:

This is a ZERO Deviation Bidding Process. Bidder is to ensure compliance of all provisions of the Bid Document and submit their Bid accordingly. Tenders with any deviation to the bid conditions shall be liable for rejection.

37. EXAMINATION OF BID DOCUMENT:

- a. The Bidder is required to carefully examine the Technical Specification, terms and Conditions of Contract, and other details relating to supplies as given in the Bid Document.
- b. The Bidder shall be deemed to have examined the bid document including the agreement/contract, to have obtained information on all matters whatsoever that might affect to execute the project activity and to have satisfied himself as to the adequacy of his bid. The bidder shall be deemed to have known the scope, nature and magnitude of the supplies and the requirements of material and labour involved etc. and as to all supplies he has to complete in accordance with the Bid document.
- c. Bidder is advised to submit the bid on the basis of conditions stipulated in the Bid Document. Bidder's standard terms and conditions if any will not be considered. The cancellation / alteration / amendment / modification in Bid documents shall not be accepted by TSREDCO
- d. Bid not submitted as per the instructions to bidders is liable to be rejected. Bid shall confirm in all respects with requirements and conditions referred in this bid document.

38. CORRUPT OR FRAUDULENT PRACTICES:

The TSREDCO requires that Successful Bidders/ Contractors should follow the highest standard of ethics during the execution of contract. In pursuance of this policy, the TSREDCO



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OFG/Ashram Schools-TWD/2020-21

- a. defines, for the purposes of this provision, the terms set forth as follows :
- b. “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the bid process or in contract execution; and
- c. “fraudulent practice” means a misrepresentation of facts in order to influence a bid process or the execution of a contract to the detriment of the TSREDCO /Govt scheme, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the TSREDCO of the benefits of free and open competition;
- d. Will declare a firm ineligible/debarred, either indefinitely or for a specific period of time, a GOVT contract if at any time it is found that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government/ TSREDCO schemes.

39. DEBARRE FROM PARTICIPATING IN TSREDCO’S ROOF TOP TENDER:

TSREDCO reserves the right to carry out the performance review of each Bidder from the time of submission of Bid onwards. In case it is observed that a bidder has not fulfilled its obligations in meeting the various timelines envisaged, in addition to the other provisions of the BID, such Bidders may be debarred from participating in TSREDCO’s any future tender for a period as decided by the competent authority of TSREDCO.

40. FINAL DECISION AND FINAL CERTIFICATE:

Upon completion of 5 years of O&M and subject to the beneficiary department officials being satisfied, the TSREDCO shall give a certificate herein referred to as the Final Certificate to that effect and the Successful bidder to have fulfilled the whole of his obligations under Contract.



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OFG/Ashram Schools-TWD/2020-21

SECTION-E **Bidder Information**

(In technical bid)

| | | |
|----|--|---|
| 1 | Name of the organization | |
| 2 | Year of establishment | |
| 3 | Complete postal address | |
| 4 | Name & Designation of Authorized person | |
| 5 | Phone No.'s | |
| 6 | Fax No. | |
| 7 | Email | |
| 8 | Nature of the firm (Proprietary/partnership/etc...) | |
| 9 | Bank Details of the Agency: | |
| | Bank Name | |
| | Bank Address | |
| | Bank Account Number | |
| | IFSC Code | |
| 10 | PAN No. | |
| 11 | TIN No. | |
| 12 | Service Tax Registration No. | |
| 13 | Total No. of branch offices in Telangana | |
| 14 | Bid Document Fee (Non refundable) | Amount Rs. : UTR No. : UTR Date : Issuing Bank & Branch : |
| 15 | EMD | Amount Rs. : UTR/BG No. : UTR No/BG Date : Issuing Bank & Branch : |
| 16 | Details of certificates enclosed. | |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

IN COVER 'A'

Forms

Turn over details of item/product – *2017- 18 to 2019-20*

| S.No | Solution | Amount (Rs in Lakhs) |
|-------------|-----------------|-----------------------------|
| | | |
| | | |
| | | |

List of Major Customers – 2017- 18 to 2019-20

| S. No | Customer Full Address | Details of Supplies made | Turn Over (Rs. In Lakhs) |
|--------------|------------------------------|---------------------------------|---------------------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

SECTION-F

FINANCIAL BID - PRICE BID

(On the official Letterhead of the firm)

(To be submitted in a separate envelope)

The cost of SPV power plants shall include their respective components as per their respective technical specification, including cables, MCBs, switches, fuses etc., as per the site requirement and shall be a lump-sum turnkey price:

| S N o | Particulars | Qty | Units | Estimated Rate in Rs. |
|-----------------------|---|-----|-------|-----------------------|
| 1 | Supply & installation of 30W LED ceiling Lights inclusive of Transportation cost including loading and unloading and Internal Wiring for 30W LED ceiling Lights including necessary cables and other material. | 6 | No.s | 19504 |
| 2 | a). Supply & installation of 30W LED Street Lights inclusive of Transportation cost including loading and uploading, External wiring for poles of 30W LED Street lights with MCB Control with rated cables. b).Supply and erection of 6 Mtr GI poles as per specification c). Earth work excavation for foundations and depositing on bank for all lifts and with an initial lead of 10m including all operational, incidental, labour charges such as shoring, sheeting, planking, strutting, etc. complete for finished item of work including. d). Plain Cement Concrete (1:4:8) using 40 mm metal with concrete Mixture. All work upto Plinth level including cost and conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc., to site and including Seigniorage changes. | 4 | No.s | 59696 |
| 3 | Design, Supply, installation & commissioning of 1KWp Off grid power plant with five years CMC | 1 | No. | 94000 |
| Total (in Rs.) | | | | 173200 |

I/We agree to carry out the work at the estimated rates mentioned against the above items at an overall uniform percentage.

- a. Of(+) _____%(In words.....percentage only) ABOVE
(OR)
- b. Of(-) _____%(In words.....percentage only) BELOW
(OR)
- c. _____AT PAR with the estimated rates only. This will be firm till completion of the work.

Note:

- The above rates are inclusive of all taxes, duties, freight with insurance up to site, for installation and commissioning within the State of Telangana, incl. internal & external wiring, remote monitoring and CMC/AMC for 5yrs period after commission.
- The percentage quoted shall be in both figures and words, rounded to two decimal points. Percentage quoted after two decimal points, if any, shall not be considered and in case of discrepancy in the Percentage quoted between Words and Figures, the lower of the two shall be considered.

Signature of the authorized person:

Name of the authorized person:

Designation:



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OFG/Ashram Schools-TWD/2020-21

CHECK LIST

IMPORTANT:

The Bidder must ensure that the following details in the check list are furnished along with the bid document. The bidder must also carefully go through all the contents of the BID Document and any additional information/documents, required more than the items listed in the check list below, also shall have to be furnished. Non-furnishing of any required information/document as per the Tender Document will lead to rejection of the bid. **(in the following order only).**

| No | Documents Required from Contractor | Yes/ No | Pg. No. | Name of the File uploaded |
|-----------|---|--------------------|--------------------|--------------------------------------|
| 1 | Tender Document Fee of Rs.29500 /- to be paid online. | | | |
| 2 | EMD of Rs.4,00,000/- to be paid online or BG drawn from a Scheduled Bank or Exemption letter for this work only | | | |
| 3 | Bidder Information Sheet | | | |
| 4 | Tender document, duly signed and stamped in token of accepted all the terms and conditions of the tender schedule. | | | |
| 5 | Registration Certificate (firm registration) | | | |
| 6 | Copy of PAN certificate | | | |
| 7 | valid Registration with TSREDCO | | | |
| 8 | Certificate of the bidder's turnover for the financial years 2017-18, 2018-2019 and 2019-20 in rupees must be enclosed and be duly certified by firm of Chartered Accountant. | | | |
| 9 | Solar PV Module Efficiency has to be greater than 15% @STC. (proof to be submitted) | | | |
| 10 | The bidder should have set up cumulative 100kWp off & On grid solar power plant or above (with 50KWp off grid capacity is mandatory) | | | |
| 11 | List of present clients with contact address & telephone numbers | | | |
| 12 | Certificate to the effect the solar PV modules are indigenously manufactured in India | | | |
| 13 | LED Lights Test Reports | | | |
| 14 | Power of Attorney, wherever applicable | | | |
| 15 | Any other information/documents that are required in the bid document | | | |
| 16 | Latest GST/ Sales Tax clearance certificate. | | | |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

LIST OF 100 NO'S OF TWD ASHRAM SCHOOLS

| S.NO | NAME OF THE DISTRICT | NAME & LOCATION OF THE ASHRAM SCHOOL |
|-------------|-----------------------------|---|
| 1 | ADILABAD | AHS (SPORTS) UTNOOR |
| 2 | ADILABAD | AHS UTNOOR |
| 3 | ADILABAD | AHS JATHERLA |
| 4 | ADILABAD | AHS HASNAPUR |
| 5 | ADILABAD | AHS LUXETTIPET |
| 6 | ADILABAD | AHS TADIHATHNOOR |
| 7 | ADILABAD | AHS BAZARHATHNOOR |
| 8 | ADILABAD | AHS WADGAON |
| 9 | ADILABAD | AHS PITTABONGRAM |
| 10 | ADILABAD | AHS BELA |
| 11 | ADILABAD | AHS WANWAT |
| 12 | ADILABAD | AHS MANKAPUR |
| 13 | ADILABAD | AHS JHARI |
| 14 | ADILABAD | AHS PATNAPUR |
| 15 | ADILABAD | STBH BHEEMPUR |
| 16 | ADILABAD | AHS YENDA |
| 17 | ADILABAD | AHS TAMSI |
| 18 | ADILABAD | AHS ANDERBANDH |
| 19 | ADILABAD | STBH ECHODA |
| 20 | ADILABAD | AHS SAYEEDPUR |
| 21 | ADILABAD | STBH NARNOOR |
| 22 | ADILABAD | AHS GADIGUDA |
| 23 | ADILABAD | AHS RIMMA |
| 24 | ADILABAD | AHS PARDI-B |
| 25 | BHADRADRI KOTHAGUDEM | AHS PALONCHA |
| 26 | BHADRADRI KOTHAGUDEM | AHS ARLAGUDEM |
| 27 | BHADRADRI KOTHAGUDEM | AHS PARKALAGANDHI |
| 28 | BHADRADRI KOTHAGUDEM | AHS UPPUSAKA |
| 29 | BHADRADRI KOTHAGUDEM | AHS CHENNANGALAGADDA |
| 30 | BHADRADRI KOTHAGUDEM | AHS KINNERASANI |
| 31 | BHADRADRI KOTHAGUDEM | AHS CHEEPURIGUDEM |
| 32 | BHADRADRI KOTHAGUDEM | AHS BOJJAIGUDEM |
| 33 | BHADRADRI KOTHAGUDEM | AHS GONDIGDUDEM |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

| | | |
|----|----------------------|-------------------------|
| 34 | BHADRADRI KOTHAGUDEM | AHS KOTHAPALLY |
| 35 | BHADRADRI KOTHAGUDEM | AHS KOYAGUDEM |
| 36 | BHADRADRI KOTHAGUDEM | AHS GANGARAM |
| 37 | BHADRADRI KOTHAGUDEM | AHS SARVARAM |
| 38 | BHADRADRI KOTHAGUDEM | AHS UNJUPALLY |
| 39 | BHADRADRI KOTHAGUDEM | AHS KARAKAGUDEM |
| 40 | BHADRADRI KOTHAGUDEM | AHS REGALLATHANDA |
| 41 | BHADRADRI KOTHAGUDEM | AHS KAMALAPURAM |
| 42 | BHADRADRI KOTHAGUDEM | AHS SHAMBUNIGUDEM |
| 43 | BHADRADRI KOTHAGUDEM | AHS NARAYANA RAOPETA |
| 44 | BHADRADRI KOTHAGUDEM | AHS BHADRACHALAM |
| 45 | BHADRADRI KOTHAGUDEM | AHS SUNNAMBATTI |
| 46 | BHADRADRI KOTHAGUDEM | AHS PEDAVAGUPROJECT |
| 47 | JS BHUPALPALLY | AHS CHINNABOINAPALLY |
| 48 | JS BHUPALPALLY | AHS LAXMINAGARAM |
| 49 | JS BHUPALPALLY | AHS KOMATIPALLY |
| 50 | JS BHUPALPALLY | AHS KODISHALA |
| 51 | JS BHUPALPALLY | AHS KARLAPALLY |
| 52 | JS BHUPALPALLY | AHS BHRAHAMANAPALLY |
| 53 | JS BHUPALPALLY | AHS RAINIGUDEM |
| 54 | JS BHUPALPALLY | AHS KANAIGUDEM |
| 55 | KB ASIFABAD DIST | AHS POCHAMLODDI |
| 56 | KB ASIFABAD DIST | AHS MARLAWAI |
| 57 | KB ASIFABAD DIST | AHS TIRYANI |
| 58 | KB ASIFABAD DIST | AHS(B) SALUGUPELLY |
| 59 | KB ASIFABAD DIST | AHS KANCHANPALLY |
| 60 | KB ASIFABAD DIST | AHS PANAPATAR |
| 61 | KB ASIFABAD DIST | AHS KOHINOOR-K |
| 62 | KHAMMAM | AHS: USIRIKAYALAPALLY |
| 63 | KHAMMAM | AHS: RELAKAYALAPALLY |
| 64 | KHAMMAM | AHS:MOOLAPOCHARAM |
| 65 | MAHABUBABAD | AHS BOYS GUDUR |
| 66 | MAHABUBABAD | AHS BOYS KOTHAGUDA |
| 67 | MAHABUBABAD | AHS SEETHANAGAR |
| 68 | MAHABUBABAD | AHS BOYS SADIREDDYPALLY |
| 69 | MAHABUBABAD | AHS IRSULAPURAM |



Telangana State Renewable Energy Development Corporation Ltd

Tender Notice. No. TSREDCO/SE/SPV/1kWp-OfG/Ashram Schools-TWD/2020-21

| | | |
|-----|--------------|--|
| 70 | MAHABUBABAD | AHS OOTLAMATWADA |
| 71 | MAHABUBABAD | AHS BOYS MADAGUDA |
| 72 | MAHABUBNAGAR | AHS KOTHAPALLY |
| 73 | MANCHERIAL | A.H.S(B)-JANNARAM |
| 74 | MANCHERIAL | A.H.S(B)-BELLAMPALLY |
| 75 | MANCHERIAL | A.HS(B)-MALIKAPALLY |
| 76 | MANCHERIAL | A.H.S(B)-VEMANAPALLY |
| 77 | MANCHERIAL | A.H.S(B)-LUXETTIPET |
| 78 | MANCHERIAL | A.H.S(B)-BHEEMARAM |
| 79 | MANCHERIAL | AH.S(B)-KUSHNAPALLY |
| 80 | MANCHERIAL | A.H.S(B)-BABARNAGAR AT MANCHERIAL |
| 81 | MANCHERIAL | A.H.S(B)-REGULAGUDA |
| 82 | NAGARKURNOOL | AHS (B) ATCHAMPET |
| 83 | NAGARKURNOOL | AHS (B) VATVARLAPALLY |
| 84 | NAGARKURNOOL | AHS (B) BANALA |
| 85 | NAGARKURNOOL | AHS (B) APPAIPALLY |
| 86 | NIRMAL | AHS (B) NIRMAL |
| 87 | NIRMAL | AHS (B) MUDHOLE |
| 88 | NIRMAL | AHS (B) KHANAPUR |
| 89 | NIRMAL | AHS (B) TANOOR |
| 90 | NIRMAL | AHS (B) RASIMETLA |
| 91 | NIRMAL | AUPS(B) KADBAM |
| 92 | NIRMAL | AHS (B) MALLAPUR |
| 93 | NIRMAL | AUPS (B) NARSAPUR-G |
| 94 | NIRMAL | AHS (B)KOSUGUTTA |
| 95 | NIRMAL | AHS (8) DODERNA |
| 96 | NIZAMABAD | TW BOYS ASHRAM SCHOOL SUDDAPALLY |
| 97 | NIZAMABAD | TW BOYS ASHRAM SCHOOL VARN I |
| 98 | NIZAMABAD | TW BOYS ASHRAM SCHOOL SUDDAPALLY |
| 99 | VIKARABAD | ST BOYS HOSTEL KULKACHERLA (CONVERTED AS) |
| 100 | VIKARABAD | ST BOYS ASHRAM SCHOOL MARPALLY |