## Tender Schedule for

Design, Supply, Installation & Commissioning of 24Watt X 4 Arm Solar PV based Standalone LED Streetlight for 28 No's at Nagaram Cluster in Jayashankar Bhupalapally District under Rurban Scheme with 5 Years Comprehensive Maintainance Contract through E-tender (2nd call- Short Tender)

Tender Ref No:TSREDCO/EC/SE/RURBAN-JAYASHANKAR BHUPALAL PALLY/

2020-21 dated 22 .12.2020



# Telangana State Renewable Energy Development Corporation Ltd (TSREDCO)

6-2-910, Vishvesharaya Bhavan, Khairatabad, Hyderabad-500 004 Phone: 040-23201502, 23201503

Fax: 040-23201504

E-mail: <a href="mailto:pd@tsredco.telangana.gov.in">pd@tsredco.telangana.gov.in</a>
Web site: <a href="mailto:www.tsredco.telangana.gov.in">www.tsredco.telangana.gov.in</a>

E-Tender is invited for

Design, Supply, Installation & Commissioning of 24Watt X 4 Arm Solar PV based Standalone LED Street light for 28 No's at Nagaram cluster in Jayashankar bhupalapally District under RURBAN scheme with 5 Years Comprehensive Maintenance Contract.

TSREDCO invites E-tender from LED Suppliers/ manufactures for "Design, Supply, Installation & Commissioning of 24Watt X 4 Arm Solar PV based Standalone LED Streetlight for 28 No's at Nagaram cluster in Jayashankar Bhupalapally Dist with 5 Years Comprehensive Maintenance Contract". The interested suppliers/ manufactures are required to submit details for the above subjected tender as per formats provided at Part-IV & V. Please write prominently on the envelope the subject i.e. "E-Tender for Design, Supply, Installation & Commissioning of 24Watt X 4 arm Solar PV based Standalone LED Street light for 28 No's at Nagaram cluster in Jayashankar Bhupalapally District with 5 Years Comprehensive Maintenance Contract".

Your Tender shall be submitted through www.tender.telangana.gov.in.

For further details please visit our website: <u>tsredco.telangana.gov.in</u>.

The Vice Chairman Managing Director,
Telangana State Renewable Energy Development Corporation Ltd (TSREDCO)

6-2-910, Vishvesharaya Bhavan, Khairatabad, Hyderabad-500 004

Phone: 040-23201502, 23201503

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## PART – I: GENERAL DETAILS

## 1. Background

TSREDCO as the State Nodal Agency (SNA) Ministry of New and Renewable Energy, Govt. of India to implement the various Renewable Energy programmes within the State of Telangana. Accordingly, TSREDCO is installing Standalone Solar LED streetlights in Telangana State under various schemes such as RURBAN, MP LADs, MLA Funds, CSR funds etc.

The Government of India has launched Shyam Prasad Mukerji, RURBAN mission with a vision of Development of cluster villages that preserve and nature the essence of rural community life with focus on equity and inclusiveness without compromising with the facilities perceived to be essentiality urban in nature.

Accordingly, TSREDCO is inviting the interested bidders for Design, Supply, Installation & Commissioning of **24W X 4 arm** Solar PV based Standalone LED Street light for 28 **No**'s at various locations in Nagaram cluster of Jayashankar Bhupalapally District under Rurban scheme with 5 Years of Comprehensive Maintenance Contract through Telangana e-tender portal\*.

Any amendment(s)/ corrigendum/clarification(s) with respect to this Tender shall be uploaded on the E-tender website only. The bidders should keep themselves updated by regularly visiting the Telangana E-tender website / TSREDCO website for any amendment/ corrigendum/ clarification in regard to this Tender.

## **DISCLAMIER:**

1. Telangana State Renewable Energy Development Corporation Limited (TSREDCO) reserves the right to modify, amend or supplement this document including all formats and Annexures and also right to reserve cancellation of tender at any time without any intimation.

## 2. Bid Information Sheet.

S.No. Particulars

1. Name of the Company

Details

Telangana State Renewable Energy Development Corporation Ltd (TSREDCO)

<sup>\*</sup>The bids for e-tenders will be submitted only through online website i.e., <a href="https://tender.telangana.gov.in">https://tender.telangana.gov.in</a>.

2.	Tender Ref No	Tender Ref No: TSREDCO/EC/SE/RURBAN-JAYASHANKAR BHUPALAL PALLY/ 2020-21 dated: 22.12.2020		
3.	Name of the work	Design, Supply, Installation & Commissioning of 24 Watt X 4 arm Solar PV based Standalone LED Streetlight of 28 No's with 5 Years of Comprehensive Maintenance Contract. (2 <sup>nd</sup> call- short Tender)		
4.	Tender Type	Open		
5.	Bid Validity Period	120 days from the date of opening of commercial bid		
6.	Cost of tender document	Rs.25,000 + GST @ 18% The cost of tender document has to pay online payment only		
7.	Last date &time of submission	30.12.2020 by 3.00 PM		
8.	Bid Security Deposit (EMD)	Bid Security for Rs.2.00 Lakhs shall be submitted along with Technical Bid through  1. Demand Draft in favour of TSREDCO, payable at Hyderabad (OR)  2. Online payment mode through e-tender website. Firms claiming Exemptions for Bid Security shall submit letter from NSIC/ SSI/ MSME for this tender.		
9.	Technical Bid Opening Date and Time	30.12.2020 at 3:30 PM at registered office of TSREDCO, Hyderabad		
10.	Financial Bid Opening Date and Time	31.12.2020 at 03:00 PM at registered office of TSREDCO, Hyderabad		
11.		General Details Information to Bidders (ITB) and General Conditions. General Technical Specification and  — Technical Bid  — Financial Bid		
12.	Contact Person(s) for Queries	Project Director (EC) Telangana State Renewable Energy Development Corporation Ltd (TSREDCO), Vishvesharaya Bhavan, Khairatabad, Hyderabad - 500 004 Ph: 040 - 23201502, 23201503 Email: pd@tsredco.telangana.gov.in		
13.	Queries related to on line bid submission	Vupadhi Techno Services Pvt. Ltd. .Ph: +91 40-33762222, 23		

## **NOTE: Important Instructions to Bidders**

Bidder shall submit bid proposal along with Bid Document fee and EMD, complete in all respect as per the Bid Information Sheet. Technical bids will be opened in presence of authorized representatives of bidders who wish to be present.

TSREDCO have right to reject the bidding process at any stage or right to cancel the tender without mentioning any reason. TSREDCO also have right to cancel the tender during bid validity period without mentioning any reason. In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.

Bid documents which include Eligibility criteria, "Technical Specifications", various conditions of contract, formats, etc. can be downloaded from Telangana e-procurement website https://tender.telangana.gov.in/.

Any amendment(s)/corrigendum/clarifications with respect to this Bid will be uploaded on Telangana e-tender website https://tender.telangana.gov.in/ and TSREDCO website tsredco.telangana.gov.in only. The Bidder should regularly follow up for any Amendment/ Corrigendum/ Clarification on the above website. No separate notifications will be issued for such notices/ amendments/ clarification etc. in the print media or individually.

Bids not accompanying the Bidding Document Cost and EMD, or those accompanied by these instruments of inadequate value, shall not be entertained, and in such cases, the online bids shall not be opened.

The Bidding Document Cost has to be necessarily submitted in the form of online payment mode i.e., RTGS/NEFT to "TSREDCO"(Account Details are mentioned below).

Beneficiary Name: M/S Telangana State Renewable Energy

Development Corporation Ltd.(TSREDCO)

Account Number : 30242010095314
IFSC CODE : SYNB0003024
Bank name : Canara Bank

Branch : Mukramjahi Road, Hyderabad.

The EMD should be in the form of online payment mode of e tender portal or RTGS/NEFT to TSREDCO or Demand Draft in favor of Telangana State Renewable Energy Development Corporation limited (TSREDCO), Payable at Hyderabad.

The details of the instruments of Bidding Document Cost and the EMD have to be entered online in relevant fields/columns of the module while submitting the e-bid. It must be ensured by the bidder that the original instruments towards Bidding Document Cost and EMD (i.e., in hard copy) are received by TSREDCO before opening time of the Technical e-bids for verification of the

details of the same. Failure to comply with this would render the bid liable for rejection and the bid will not be opened online. TSREDCO will not be responsible for any delay, loss or non-receipt of Bidding Document Cost or EMD sent by post/courier.

Any relaxation/exemption sought by bidders shall only be considered in accordance with relevant clauses of this tender document regarding submission/payment of EMD and Bidding Document Cost and shall be subject to fulfillment of conditions defined in the respective clauses. Since all the conditions explained in the respective clauses for seeking exemption from submission of Bidding Document Cost and EMD are self-explanatory, bidders should ascertain about their fulfillment of all conditions and submit their bid accordingly.

If at any stage, it is found that false information is furnished or non-compliance of any of the conditions defined at the said clauses, the bid/offer shall be considered as non-responsive and would not be considered for further evaluation. Bidder seeking exemption from submission of the EMD has to mandatorily submit/upload the scanned copy of their valid original exemption certificate(s) as asked for in the relevant clause along with other relevant documents as part of their online bid.

## PART – II: INSTRUCTIONS TO THE BIDDER (ITB) & GENERAL CONDITIONS

#### 3. Introduction

Name of the Work: Design, Supply, Installation & Commissioning of 24Watt X 4 arm Solar PV based Standalone LED Streetlight of 28 No's at various locations of Nagaram cluster in Jayashankar bhupalapally under Rurban scheme with 5 Years of Comprehensive Maintenance Contract

(2<sup>nd</sup> call- short Tender)

**Tender Reference No:** TSREDCO/EC/SE/RURBAN-NAGARAM CLUSTER - JAYASHANKAR BHUPALAPALLY /2020, dated 22.12.2020

## 3.1. Clarification on Bidding Documents

A prospective Bidder requiring any clarification to the bidding documents may notify the TSREDCO in writing or by post) at the TSREDCO mailing address indicated below. The TSREDCO will respond in writing to any request for clarification or modification of the bidding documents that it receives no later than three (3) days prior to the deadline for submission of bids prescribed by the TSREDCO. Written copies of the TSREDDCO's response (including an explanation of the query but not identification of its source) will be sent to all prospective Bidders that have received the bidding documents.

The address of TSREDCO, for communication:

## Vice Chairman & Managing Director

Telangana State Renewable Energy Development Corporation Ltd (TSREDCO),

D.No. 6-2-910, Visvesvaraya Bhavan,

The Institution of Engineers Building,

Khairatabad, Hyderabad - 500 004. Telangana State,

E-mail: <a href="mailto:pd@tsredco.telangana.gov.in">pd@tsredco.telangana.gov.in</a>, Website: <a href="mailto:tsredco.telangana.gov.in">tsredco.telangana.gov.in</a>,

Whenever the bidder is silent about the acceptance of tender conditions such as bank guarantee, warranty period, liquidated damages etc. it shall be presumed that the bidder has accepted and certified tender conditions and no further correspondence seeking specific confirmation about acceptance of these conditions shall be made.

The Bidder shall be deemed to have examined the Bid document, to have obtained his own information in all matters whatsoever that might affect carrying out the Works in line with the Technical specifications and Scope of Work specified in the document at the offered rates and to have satisfied himself to the sufficiency of his Bid.

#### 4. Eligible Tenderers.

The Tenderer shall provide sufficient documentary evidences to satisfy the following conditions:

- a) The Tender shall fulfill the terms and conditions of eligibility as an indigenous manufacturer of Solar PV Systems in accordance with the guidelines of Ministry of New and Renewable Energy, Government of India or proof of experience as contractor/System integrator in the field of Solar PV installations.
- b) Has adequate plant and manufacturing capacity available or have adequate work experience to perform the works properly and expeditiously with in the time frame specified by competent authority.
- c) Has established quality assurance systems and organization designed to achieve high level of equipment reliability in manufacturing of the Solar Systems.
- d) Has adequate financial stability and status to meet the financial obligations Pursuant to the scope of work. The firm must have average annual turnover of minimum 100 Lakhs during the last three years. Relevant documents certified by a chartered Accountant shall be enclosed.
- e) Has experience of manufacturing, supply and maintenance /after sale services in the field of installation and commissioning of Solar PV based Standalone Solar street lighting systems of more than 1000 Nos. in Govt. Departments/State Nodal Agencies/PSUs/Private OR Off Grid Solar PV systems of more than 100kWp cumulative capacities in the last three years period. The details must be submitted in the proforma given in Technical-Bid section of tender document along with proof of relevant documents (Work Orders/ POs/ Work Completion Reports/Agreements etc). However, VC & MD- TSREDCO has right to take any decision on eligibility criteria.
- f) Has adequate field service setup to provide good after sale services including necessary repair and maintenance in the state of Telangana.
- g) Has to provide after sale services for the works done by him during past years.
- h) Has Valid Test Certificates of the Solar PV based Standalone LED Street Light components as specified and required in the Technical-Bid of this tender document and the same shall be enclosed along with technical bid.
- i) Fulfill all requirements as per provisions under JNNSM, MNRE, GoI.
- j) He must be TSREDCO valid empaneled supplier/manufacturer.

In case of suppliers/ system integrators, an authorisation certificate from OEM (Original Equipment Manufacturer)/ authorised letter from distributor of respective manufacturer shall be provided for all the equipment supplied.

The above stated requirements are compulsory to be fulfilled by the tenderer and TSREDCO may also ask for any additional information as may be deemed necessary in public interest.

## 5. Preparation of Tender

#### 5.1. Procedure for Submission of Bid/EoI

The tender shall be submitted only through online mode i.e., through e-tender portal of Telangana Government. However, the hard copies of the same shall be provided by the Bidder. To TSREDCO Head Office. The procedure for the same is as follows:

• one outer and two inner envelopes labeled as Main Envelope, Envelope-I & Envelope-II respectively. The Envelopes should contain the details of the offer as follows:

**Envelope-I** should contain (This envelope appears ONLINE in dynamic form in case of etenders).

- i. Bid document fee of tender documents in the form of online payment receipt only through TSREDCO Gateway or E-tender portal [wherever applicable].
- ii. Earnest Money Deposit in the form of Demand Draft in favour of "TSREDCO" payable at Hyderabad /online payment receipt.
- iii. Complete tender Document signed and stamped on each page with filling relevant fields. The same shall be uploaded on e-tender website.
- iv. All the Formats as provided in Annexures of the tender shall be submitted after duly filling. The same shall be uploaded on e-tender website.
- v. All the necessary documents as mentioned in the tender such as Copy of PAN Card, GST Registration, IT Returns, Experience Certificates etc. shall be submitted. The same shall be uploaded on e-tender website.

**Envelope-II** should contain Price/ Financial Bid, to be submitted in 2<sup>nd</sup>inner sealed envelope, shall comprise of: (In case of e-tender Price Financial bid is to be submitted ONLINE, and blank Price/Financial bid shall be submitted in envelope II as per the format provide in tender document.

The entire two separately sealed envelopes will then be placed in one outer envelope, sealed and marked properly and submitted to the TSREDCO office on or before the deadline for submission of the bid. Every envelope (2 inner and 1 outer) should be superscripted with Tender Reference number and date, content of envelope i.e. Technical Bid OR Price/Financial bid etc, name of work and Bid opening date.

Bids not accompanied by cost of tender documents or EMD etc. shall be out-rightly rejected and treated as non-responsive, unless exempted from payment/submission of EMD, in which case, the documents asked for towards exemption need to be enclosed in the bid. Further, their Price/ Financial bid will not be opened.

#### 5.2. Deadline for submission of bids

Bids must be received by the TSREDCO at the address specified as under and the bids will be opened at the same address as per timings stated in IFB and as repeated below:

## **Vice Chairman & Managing Director**

Telangana State Renewable Energy Development Corporation Ltd (TSREDCO),

D.No. 6-2-910, Visvesvaraya Bhavan,

The Institution of Engineers Building,

Khairatabad, Hyderabad - 500 004. Telangana State, India

Date of submission of bids: As mentioned in Bid Information Sheet

Date of bid opening: As mentioned in Bid Information Sheet

Bids must be received at the address specified above but no later than the time and date stated as above. In the event of the specified date for submission of bids being declared a holiday for the TSREDCO, the bids will be received up to the appointed time on the next working day.

#### 5.3. Language of Tender and Measure

The tender prepared by the tenderer along with all the related documents shall be in English .Unit measurements shall be metric in accordance with SI System. All correspondence between the tenderer and TSREDCO shall also be in English.

## **5.4. Ernest Money Deposit (EMD)**

The tenderer shall furnish Bid Security/EMD of Rs.2,00,000/- as mentioned in the Bid Information Sheet in the shape of DD in favor of TSREDCO, payable at Hyderabad. Tenders without Bid Security/EMD shall be rejected by TSREDCO as being non-responsive. No interest shall be paid by TSREDCO on the amount of Bid Security/EMD deposition as well as deposition of Security Deposit. The Tenderers exempted from EMD shall provide relevant support documents along with technical bid.

The Bid Security/EMD may be forfeited: -

- If a Tenderer withdraws his tender during the specified period of validity of offer.
- If the successful Tenderer fails to sign the contract agreement within stipulated period.

The Bid Security/EMD of all unsuccessful bidders shall be released soon after selection of selected bidder(s) against submission of their written intimation regarding acceptance of work and deposition of security deposit amount.

#### 5.5. Price Basis

Price basis of the price quoted shall be on F.O.R (Free on Road) destination basis for site. Price mentioned in the quotation must be firm. Hence prices in Letter of Award shall be firm and not subject to escalation till the execution of the complete order and its subsequent amendments accepted by the bidder even though the completion / execution of the order may take longer time than the delivery period specified and accepted in the Letter of Award.

Statutory variation in applicable taxes & duties (other than excise duty) shall only be on account of Employer in case bidder has shown the rates of present taxes in their bid and other prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. Even in case prices asked in Bid price Schedule are quoted as inclusive of taxes, tax rates shall be shown separately. Bidders shall quote all prices in Indian Rupees only.

## 5.6. Period of Validity of Tender

Tenders shall remain valid for a period of 120 days after the closing date prescribed by the TSREDCO for the receipt of tenders. A tender valid for a shorter period may be rejected by the TSREDCO as being non-responsive. In exceptional circumstances, the TSREDCO may solicit the bidder's consent to an extension of the bid validity period. The request and response thereto shall be made in writing thro' letters/ e-mails. If the bidder accepts to prolong the period of validity, the bid security/EMD shall also be suitably extended. A bidder may refuse the request for Tender Validity Extension without forfeiting its bid security. A bidder granting the request will not be required nor permitted to modify its Tender.

#### 5.7. Inspection / Checking / Testing

All materials / equipment's manufactured/ supplied by the bidder against the Letter of Award shall be subject to inspection, check and/or test by the TSREDCO or his authorized representative after successful installation or commissioning.

## 5.8. Taxes, Levies and Duties

Prices of items shall be quoted as per formats provided in tender document. All taxes and duties shall be clearly indicated as per the format.

## 5.9. TSREDCO reserves the right to

Negotiate with the Bidders for further reduction of prices.

#### 5.10. Award of Contract

The Contract will be awarded by TSREDCO to the successful bidder in accordance with the terms and conditions specified in the tender document/agreed upon during negotiation and reproduced in Letter of Award.

## 5.11. Delivery Schedule

Time will be the essence of order and no variation shall be permitted in the delivery

time/delivery schedule mentioned in the order unless agreed by TSREDCO without levy of LD. Tentative time schedule is enclosed in the bid document. Delivery of the equipment/material described shall be deemed to constitute acceptance of this order and terms and conditions by the bidder at the price specified.

## 5.12. Force Majeure

Bidder shall not be considered in default if delay in delivery occurs due to causes beyond his control such as acts of God, natural calamities, civil wars, strikes, fire, frost, floods, riot. Only those causes which have duration of more than 7 days shall be considered cause of force/ calendar majeure. A notification to this effect duly certified by local chamber of commerce/ statutory authorities shall be given by the bidder to TSREDCO by registered/speed post. In the event of delay due to such causes, the delivery schedule will be extended for a length of time equal to the period of force majeure or at the option of TSREDCO, the order may be cancelled. Such cancellation, would be without any liability whatsoever on the part of TSREDCO. In the event of such cancellation, the bidder shall refund any amount advanced or paid to the bidder by TSREDCO and deliver back any materials issued to him by the Purchaser and release facilities, if any provided by the Purchaser.

## 5.13. Limitation of Liability

Except in cases of criminal negligence or willful misconduct, the Bidder shall not be liable to the TSREDCO, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Bidder to pay liquidated damages to the TSREDCO and the aggregate liability of the bidder to the TSREDCO, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to any obligation of the Bidder to indemnify the TSREDCO with respect to patent infringement or as specified in the tender.

## 6. Bid Opening and Evaluation

## **6.1. Bid Opening Process**

TSREDCO will open all bids in the presence of bidders' or its representatives who choose to attend the opening at the time, on the date and at the place specified in the bid document. Bidders' or its representatives shall sign a format as proof of their attendance. In the event of the specified date for the opening of bids being declared a holiday for the TSREDCO, the bids will be opened at the appointed time on the next working day.

#### 6.2. Technical Evaluation

The TSREDCO will carry out a detailed evaluation of the bids previously determined to be substantially responsive in order to determine whether the technical aspects are in accordance with the requirements set forth in the bidding documents. In order to reach such a determination, the TSREDCO will examine and compare the technical aspects of the bids on

the basis of the information supplied by the bidders, taking into account the following factors:

- a. Overall completeness and compliance with the technical specifications and drawings; deviations from the technical specifications as per the bid; suitability of the facilities offered in relation to the environmental and climatic conditions prevailing at the site; and quality, function and operation of any process control concept included in the bid. The bid that does not meet minimum acceptable standards of completeness, consistency and detail will be rejected for non- responsiveness.
- b. Achievement of specified performance criteria by the facilities as per scope of work
- c. Type, quantity and long-term availability warranty spare parts and also mandatory and recommended spare parts and maintenance services
- d. Any other relevant factors, if any, listed in the tender document, or that the TSREDCO deems necessary or prudent to take into consideration

#### 6.3. Commercial Evaluation

The Financial Bid will be evaluated of those who have successfully complied with all the technical specifications mentioned in the technical bid and as per the prices quoted in the Financial Bid Format which is provided in the tender document. Final Financial Evaluation will be done as per the prices quoted in the financial bid and evaluated through e-tender portal only. The report will be automatically generated through portal.

## 6.4. Quantity Variation

The TSREDCO reserves the right to vary the quantity of lights and /or any of the spares and maintenance equipment up to +/- 20% and/or delete any items of spares altogether at the time of Award of Contract. Successful bidder, on whom award is made, is to supply this quantity variation at same price and terms and conditions of contract.

#### **6.5.** Additions / Alterations / Modifications

TSREDCO reserves the right to make minor additions/alterations/modifications to the quantity of the items to the extent of +/- 20% in the Letter of Award. The bidder shall supply such quantities also at the same rate as originally agreed to and incorporated in the Letter of Award. However, TSREDCO may increase this quantity as per the local conditions, if required.

#### 6.6. Signing the Contract Agreement

At the same time as the TSREDCO notifies the successful Bidder that its bid has been accepted, the TSREDCO will send the bidder the contract agreement.

Within fifteen (15) days of receipt of the contract agreement, The Successful Bidder shall execute an agreement with TSREDCO in the INR 200 non-judicial stamp paper of Telangana

Jurisdiction only in the name of the Tenderer (2 sets). In case of the successful bidder fails to execute necessary agreements as prescribed, within the stipulated period, then his EMD shall be forfeited and his tender held as non-responsive.

#### 6.7. Security Deposit

The EMD of the successful bidder shall be converted to Contract Performance Security at the time of Agreement. However, a Contract Performance Security of 10% work order value shall be deposited. The industries exempted from EMD shall also pay Contract Performance Security.

If the converted Contract Performance Security amount is more than 10% of the work order value, the balance amount shall be deposited at the time of issuing of respective work order or/and if the converted Contract Performance Security amount is less than 10% of the work order value, the balance amount shall be adjusted in future respective work orders and as decided by TSREDCO.

The earnest money may be forfeited: -

- If a Tenderer with draws their tender during the specified period of validity of offer.
- If the successful Tenderer fails to sign the contract agreement within stipulated period.

The authority reserves the right of awarding the work, after receiving the consent to work, the earnest money of such Tenderer shall be forfeited if they fail to sign the contract agreement with in stipulated period.

The earnest money of all unsuccessful bidders shall be released soon after selection of selected bidder(s) against submission of their written intimation.

## 7. Liquidated Damages

In case of any delay in the execution of the order beyond the stipulated time schedule including any extension permitted in writing, TSREDCO reserves the right to recover from the bidder a sum equivalent to 0.5% of the value of the delayed equipment supply/unexecuted portion of work for each week of delay and part thereof subject to a maximum of 5% of the total value of the contract.

Alternatively, TSREDCO reserves the right to purchase and distribute equipment/ material from elsewhere at the sole risk at the cost of successful bidder/contractor and recover all such extra cost incurred by TSREDCO in procuring the material from resources available including EMD/Bid Security/encashment of Bank Guarantee or any other sources etc. Further, if any extra cost is incurred by TSREDCO due to delay in work completion by the party beyond the completion time as per P.O./L.O.A., the same shall also be recovered from party's invoice/EMD/BGs etc.

Alternatively, TSREDCO may cancel the order completely or partly without prejudice to his right under the alternatives mentioned above.

## 8. Governing Law

The Contract shall be governed by and interpreted in accordance with laws in force in India. The Courts of Hyderabad shall have exclusive jurisdiction in all matters arising under the Contract.

#### 9. Taxes and Duties

Except as otherwise specifically provided in the Contract, the bidder shall bear and pay all taxes, duties, levies and charges assessed on by all municipal, state or central Government authorities in connection with the facilities where the Site is located.

If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction there-from. However, these adjustments would be restricted to direct transactions between the TSREDCO and the Contractor. These adjustments shall not be applicable on procurement of raw materials, intermediary components etc.

## 10. Completion Time Guarantee:

If the Successful bidder, on whom award is made fails to attain Completion of the work or any part thereof within the Time or any extension thereof on whom award is made shall pay to the TSREDCO liquidated damages in the amount computed at the rates specified in the tender document. The aggregate amount of such liquidated damages shall in no event exceed the amount specified as "Maximum" in the tender document. Once the "Maximum" is reached, the TSREDCO may consider termination of the Contract.

Such payment shall completely satisfy the Successful bidder, on whom award is made obligation to attain Completion of the work or the relevant part thereof within or any extension thereof. The Bidder shall have no further liability whatsoever to the TSREDCO in respect thereof.

However, the payment of liquidated damages shall not in any way relieve the Successful bidder, on whom award is made from any of its obligations to complete the work or from any other obligations and liabilities under the Contract.

## 11. Insurance

The Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. For delivery of goods at site, the insurance shall be obtained by the Contractor, for an amount not less than the Contract Price of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War risks and strikes.

## 12. Warranty

12.1 The Contractor warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements

in design and materials unless provided otherwise in the Contract. The Contractor further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Employer's Specifications) or from any act or omission of the Contractor, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

- 12.2 This warranty of all the Works shall remain valid for 5 years after the Commissioning. The Contractor shall, in addition, comply with the performance and/or guarantees specified under the Contract. If for reasons attributable to the Contractor, these guarantees are not attained in whole or in part, the Contractor shall make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests; OR
- 12.3 Pay liquidated damages to the TSREDCO with respect to the failure to meet the contractual guarantees.
- 12.4 The TSREDCO shall notify the Contractor in writing of any claims arising under this warranty.
- 12.5 Upon receipt of such notice, the Contractor shall, within the period of 15 days and with all reasonable speed, repair or replace the defective Goods or parts thereof, free of cost at the ultimate destination. The Contractor shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Employer for the replaced parts/goods thereafter. In the event of any correction of defects or replacement of defective material during the Warranty period, the Warranty for the corrected or replaced material shall be extended to a further period.
- 12.6 If the Contractor, having been notified, fails to remedy the defect(s) within 15 days, the Employer may proceed to take such remedial action as may be necessary, at the Contractor's risk and expense and without prejudice to any other rights which the Employer may have against the Contractor under the Contract. The performance guarantee and liquidated damaged be entitled to be recovered without prejudice to other rights of the Employer.

#### 13. Termination for Default

The Employer may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Contractor, terminate the Contract in whole or part:

if the Contractor fails to deliver any or all of the Goods and complete the Work within the period(s) specified in the Contractor within any extension thereof granted by the Employer or

if the Contractor fails to perform any other obligation(s)/duties under the Contract.

if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

## 14. Settlement of Disputes

## 14.1 Adjudicator

If any dispute of any kind whatsoever shall arise between the TSREDCO and the successful bidder in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity or termination, or the execution of the Facilities—whether during the progress of the Facilities or after their completion and whether before or after the termination, abandonment or breach of the Contract—the parties shall seek to resolve any such dispute or difference by mutual consultation. If the parties fail to resolve such a dispute or difference by mutual consultation, then the dispute shall be referred in writing by either party to the Adjudicator, with a copy to the other party.

The Adjudicator shall give its decision in writing to both parties within twenty-eight (28) days of a dispute being referred to it. If the Adjudicator has done so, and no notice of intention to commence arbitration has been given by either the TSREDCO or the successful bidder within fifty-six (56) days of such reference, the decision shall become final and binding upon the TSREDCO and the bidder. Any decision that has become final and binding shall be implemented by the parties forthwith.

Should the Adjudicator resign or die, or should the TSREDCO and the bidder agree that the Adjudicator is not fulfilling its functions in accordance with the provisions of the Contract; another retired Judge of High Court/Supreme Court of India shall be jointly appointed by the TSREDCO and the bidder as adjudicator under the Contract. Failing agreement between the two within twenty-eight (28) days, the new retired judge of High Court/Supreme Court of India shall be appointed as the Adjudicator under the Contract at the request of either party by the Appointing Authority specified in the SCC. The adjudicator shall be paid fee plus reasonable expenditures incurred in the execution of its duties as adjudicator under the contract. This cost shall be divided equally between the TSREDCO and the Bidder.

#### 14.2 Arbitration

If either the TSREDCO or the BIDDER is dissatisfied with the Adjudicator's decision, or if the Adjudicator fails to give a decision within twenty-eight (28) days of a dispute being referred to it, then either the TSREDCO or the bidder may, within fifty-six (56) days of such reference, give notice to the other party, with a copy for information to the Adjudicator, of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

Any dispute, in respect of which a notice of intention to commence arbitration has been given shall be finally settled by arbitration. Arbitration may be commenced prior to or after completion of the Facilities.

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.

The TSREDCO and the bidder 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 twenty-eight (28) 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 arbitrator designated in the tender.

If one party fails to appoint its arbitrator within forty-two (42) 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.

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 tender document (Governing Law) and a substitute shall be appointed in the same manner as the original arbitrator.

The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration, 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.

The arbitrator(s) shall give reasoned award.

Notwithstanding any reference to the Adjudicator or arbitration herein,

- the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree
- the TSREDCO shall pay the bidder any monies due to the bidder

## 15. Scope of Work

Scope of work covers Design, Supply, Installation & Commissioning of 24Watt X 4 arm Solar PV based Standalone LED Streetlight of 28 Nos at Nagaram cluster ,Jayashankar Bhupalapally District with 5 Years of Comprehensive Maintenance Contract as per the technical specifications . All works required for proper installation of Solar PV based standalone LED Streetlights including necessary civil and welding works shall be done by the successful bidder. 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.

a. The complete Solar PV based standalone LED Streetlights including outdoor fittings shall be warranted by the successful bidder against any manufacturing /design/installation defects for a minimumperiodof5years from the date of installation.

- b. Solar PV modules used in Streetlights 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.
- c. The successful bidder will make all necessary arrangements for satisfactory operation, maintenance and performance of the streetlighting systemduring5years warranty period.
- d. Rectification of all the defects developed in the Solar PV based standalone LED Streetlights during warranty period shall have to be done by the successful bidder promptly, at the most within 3days from the date of receipt of compliant.
- e. Warranty will include rectification/replacement of all the defective and consumable components/items including batteries. During Warranty period, all the arrangements for keeping the Solar PV based standalone LED Streetlights functional shall be the sole responsibility of the successful bidder only.
- f. After completion of the proposed works, clearances of all temporary works/ materials shall be the sole responsibility of the successful bidder and this shall be removed immediately after the requirement of such temporary work is completed.
- g. Supply and Installation of <u>Permanent Display board showing on battery box technical information of Solar PV based standalone LED Streetlights shall be done by successful bidder.</u> The matter written on these boards shall be finalized in consultation with TSREDCO.
- h. All the non-functional parts/materials/items replaced during the warranty period shall be the property of the successful bidder.
- i. The successful bidder will conduction-site training of the purchaser's/ user's personnel regarding the operation and maintenance of the Solar PV based standalone LED Streetlights.
- j. During Warranty period, the successful bidder shall have to submit annual performance report from user agency regarding functionality of the system.
- k. A leaflet containing the details of the service centers shall be provided to each purchaser as well as to TSREDCO.
- 1. If the operation or use of the system proves to be unsatisfactory during the warranty period, the installer shall replace the faulty ones or carry out necessary repairs as per the warranty terms and conditions.

## 16. Inspection by TSREDCO

All the Solar PV based standalone LED Streetlights installed will be inspected by the representative of TSREDCO within 30 days of receipt of Installation & Commissioning Certificate. During the Inspection, if the system installed is found faulty (or) not in compliance to the technical specification, the cost for re-inspection by TSREDCO after rectification/replacement shall be borne by the successful bidder.

#### 17. Service Centres

Empaneled bidder shall have minimum of one service center in Telangana. Additional service centers shall be opened in Telangana indifferent districts as follows. All service centers shall be operational till the expiry of 5 year warranty.

<100 Installations - 1 Centre

100 -300 Installations - 2 Centres
300 - 500 Installations - 3 Centres
500- 750 Installations - 4 Centres
750 - 1000 Installations - 5 Centres

The empaneled bidder shall visit the site at least once in a quarter, to attend routine maintenance, during the 5 years warranty period. However, in case of non-functioning of the system, the empaneled bidder shall attend for rectification of defects within 3 days from the date of lodging complaint.

#### 18. Warranty

- 1. Solar PV shall
  - (a) Carry a warranty of minimum 25 years.
  - (b) Must be warranted for their output peak watt capacity which shall not be less than 90% at the end of 15 years and 80% at the end of 25 years
- 2. The batteries and solar charge controllers shall carry a warranty of minimum 5 years.
- 3. The complete Solar PV based standalone LED Streetlights installed and commissioned shall be under a warranty against any manufacturing or usage defect for a minimum period of 5 years from the date of Commissioning. The mechanical items, electrical/electronic items including Charge controller/batteries/LED luminary etc. and overall workmanship of the Solar PV based standalone LED Streetlights must be warranted against any manufacturing/ design/ installation defects for a minimum period of 5 years.
- 4. The warranty will be against breakages, malfunctions, non-fulfillment of guaranteed performance and breakdowns due to manufacturing defects or defects that may arise due to improper operation of electrical /electronic components of the system but do not include physical damages by the end users.
- 5. The above warranty shall take effect from the date on which the system is taken over by the purchaser after commissioning.
- 6. The successful bidder shall be liable to make good the loss by replacing the defective product during the warranty period for the entire system with free of cost.
- 7. The warranty will cover all the materials and goods involved in the installation and commissioning of Solar PV based standalone LED Streetlights by the successful Bidder.
- 8. During the 5 years warranty and comprehensive AMC period, TSREDCO/MNRE will have all the rights to cross check the performance of LED based solar streetlights. TSREDCO may carry out the frequent inspections of the installed SSL and randomly pickup to get them tested at Government / MNRE approved any test centre. If during such test of the SSL or its any component is not found as per specified technical parameters, TSREDCO will take the necessary action to recover the losses and blacklist the firm. The decision of TSREDCO in this regard will be final and binding on the tenderer.

## 19. Payment Terms

At the time of issuing of Work Order, the successful bidder shall submit an undertaking letter to TSREDCO which is equal to 10 % of work order (including Taxes and Duties) value that can be deducted from the respective bills/invoice. The same amount will be

returned by TSREDCO to successful bidder after fulfilling warranty period plus three months.

TSREDCO service charges @ 5% plus GST @ 18% as applicable of the actual project completion cost shall be deducted at the time of release of payment

Taxes and duties shall be paid extra by the bidder as applicable on the TSREDCO service charges and the bid processing fee.

Payment of the project cost shall be paid by the TSREDCO directly to the successful bidder after satisfactory TSREDCO inspection report signed by TSREDCO representative, photographs and all necessary required documents & on submission of invoice to TSREDCO Head Office.

The Bill shall be issued by TSREDCO only after receipt of Funds from the beneficiary organization.

70% payment will be made to the successful bidder by TSREDCO within 30 to 45 days on submission of all necessary and required documents and 20% will be made after submission of performance guarantee documents from the beneficiary department duly certifying the concern district Manager to H.O,TSREDCO after 60 days from the date of successfully installation .

The Balance 10% will be released after successful completion of warranty period plus three months.

#### PART -III: GENERAL TECHNICAL SPECIFICATIONS

## 20. Technical Specifications

Design, Supply, Installation & Commissioning of 24W X 4 arm Solar PV based Standalone LED Streetlight consists of solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires /cables, module mounting pole including hardware and battery box.

## 20.1 The configuration of each model with Specifications is described below:

Model	24Watt X 4 arm Solar PV based Standalone LED Street		
	light.		
PV Module	500 Wp under STC or 250 Wp X 2 No's under STC		
Type of module	Crystalline silicon IEC/MNRE approved		
Battery (fitted in suitable	GEL, 12V-200 AH (2 No.) @ C/10 at DoD 75%		
box with lock & key)	discharge rate		
<b>Light Source &amp; Output</b>	24 Watt (4 arm (Max.)), W-LED luminaire, dispersed		
	beam, soothing to eyes with the use of proper optics and		
	diffuser with 130 lm/Watt efficacy along with dimmer.		
	Minimum 35 Lux output.		
On/off Switch	Built-in Real time clock with Battery Back-up		
	Synchronized with server time on GPRS, Adjustment /		
	Correction of Time Communication with server Through		
	GPRS/ SMS, surge protection system and Controlled		
	Lights using Semiconductor Electronic Switching		
Description	Hot dip galvanized pole. The pole should be 7m height		
	above ground level and 1.5m below ground level, top		
	2.5m (h) X 76.1mm (od) X 3.5mm thickness and bottom		
	4.5m (h) X 115mm (od) X 4mm thickness. Pole should		
	withstand wind speed of 180 km/hr and support the		
	installed solar modules. The pole shall be properly		
	concreted with M-16 or M-20 grade.		
	The mounting steel structure shall be as per latest BIS		
	2062 (amended up to date) and galvanization of		
	mounting structure shall be in compliance of BIS 4759		
	(amended up to date).		

## 20.2 Other common Technicalities required for all the above models:

Electronics Efficiency	Minimum 90% total	
Duty Cycle	Dusk to dawn at full brightness	
Autonomy	3 days or Minimum 42 operating hours per permissible discharge	

Civil foundation	Suitable to withstand higher wings for bottom one meter
	of pole

#### Other parameters are:

- a. 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.
- b. Power Control Unit/s including MPPT (Maximum Power Point Tracking) charge controller and synchronizing facility at 415V,50Hz
- c. Auxiliary AC & DC power system for control and protection system for the total plant complex including Battery and Battery charger for inverter and other such accessories that require a power backup.
- d. Earthing and Lightning Protection system for the complete installation
- e. DC Power and Control Cables and accessories
- f. Communication system with existing plant installations and control rooms
- g. Civil works including, foundations, structures of pole for safety of plant.

#### 20.3 Item wise detailed description of Solar PV based Standalone LED Streetlights:

#### 20.3.1 Solar Photovoltaic Modules:

- The PV modules used should be made in India.
- The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-2- requirements for construction & Part 2 – requirements for testing, for safety qualification or equivalent IS.
  - a) For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701
  - b) Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
  - c) PV modules must be tested and approved by one of the IEC authorized test centers.
  - d) The module frame shall be made of corrosion resistant materials, preferably having anodized aluminum.
- The rated output power of any supplied module shall have **ONLY POSITIVE** tolerance
- The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
- The module shall be provided with a junction box with either provision of external screw
  terminal connection or sealed type and with arrangement for provision of by-pass diode.
  The box shall have hinged, weather proof lid with captive screws and cable gland entry
  points or may be of sealed type and IP-65 rated.
- Curves at STC should be provided by bidder.

- Modules deployed must use a RF identification tag LAMINATED INSIDE. The following information must be mentioned in the RFID used on each modules (must be able to withstand harsh environmental conditions).
  - a) Name of the manufacturer of the PV module
  - b) Name of the manufacturer of Solar Cells.
  - c) Month & year of the manufacture (separate for solar cells and modules)
  - d) Country of origin (separately for solar cells and module)
  - e) I-V curve for the module Wattage, Im, Vm and FF for the module
  - f) Unique Serial No and Model No of the module
  - g) Date and year of obtaining IEC PV module qualification certificate.
  - h) Name of the test lab issuing IEC certificate.
  - Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001

## **20.3.2 Battery**

- i. Gel Type.
- ii. The battery will have a minimum rating of 12V at C/10 discharge rate.
- iii. 75 % of the rated capacity of the battery should be between fully charged and load cut off conditions.
- iv. Battery should conform to the latest BIS/ International standards.
- v. The Batteries makes should be empanelled with MNRE.

## 20.3.3 Light Source

- i. The light source will be a white LED type.
- ii. The colour temperature of white LED used in the system 5500K to 6500K.
- iii. LED chip efficacy shall be more than 135 Lumens/watt at Ti 25deg C
- iv. The light output from the white LED light source should be constant throughout the duty cycle.
- vi. The lamps should be housed in an assembly suitable for outdoor use.
- vii. The temperature of heat sink should not increase more than 20°C above ambient temperature during the dusk to dawn operation.
- viii. Cover/glass with lens Fixture cover UV stabilized Polycarbonate or toughened glass be required with proper IP66 provision.
  - ix. Colour rendering index (CRI) of the LEDs used in the luminaires hall be greater than 80
  - x. Life span of LEDs used in the Luminaire shall be more than 50,000 hours at 80% light output.
  - xi. Tenderer shall submit the LM 79/IS16106 test report from any of the ILAC/MRA/KOLAS/EPA/NABL accredited laboratory along with bid
- xii. Tenderer shall submit proof of procurement of LEDs and LM-80 Test reports of specific LED used in the proposed Luminaire
- xiii. Tenderer shall submit the Photo Biological Safety Report for the LEDs as per IEC 62471 and assessment of blue light as per IEC/TR 62778 Ed. 1.0

#### 20.3.4 Electronics

- i. The total electronic efficiency should be at least 90%.
- ii. Electronics should operate at 12 V and should have temperature compensation for proper charging of the battery throughout the year.
- iii. No Load current consumption should be less than 20 mA.
- iv. The PV module itself should be used to sense the ambient light level for switching ON and OFF the lamp.
- v. The PCB containing the electronics should be capable of solder free installation and replacement.
- vi. Necessary lengths of wires/cables, switches suitable for DC use and fuses should be provided.
- vii. Automatic Voltage trip/reset levels and Controlled Lights using Semiconductor Electronic Switching

## **20.3.5** Electronic protections

- i. Adequate protection is to be incorporated under "No Load" conditions e.g. when the lamp is removed and the system is switched ON.
- ii. The system should have protection against battery overcharge and deep discharge conditions.
- iii. Fuse should be provided to protect against short circuit conditions.
- iv. Protection for reverse flow of current through the PV module(s) should be provided.
- v. Electronics should have temperature compensation for proper charging of the battery throughout the year.
- viii. Adequate protection should be provided against battery reverse polarity.
  - ix. Load reconnect should be provided at 80% of the battery capacity status.

## 20.3.6 Mechanical Components

- i. A corrosion resistant metallic frame structure should be fixed on the pole to hold the SPV module.
- ii. 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.
- iii. The pole should be made of Galvanized Iron (GI) pipe withstanding the speed for the wind zone of the location where the SSL Pole is proposed to be installed (wind speed of 180 kmph)
- iv. The height of the pole should be as mentioned in the respective model specification after grouting and final installation.
- v. The pole should have the provision to hold the luminaire.
- vi. The lamp housing should be water proof and should be painted with a corrosion resistant paint.
- vii. A vented, acid proof and corrosion resistant metallic box or plastic box [made of Polypropylene Copolymer (PP-CP)] with a locking arrangement for outdoor use should be provided for housing the battery.

#### 20.3.7 Indicators

The system should have two indicators, green and red.

- a. 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.
- b. Red indicator should indicate the battery "Load Cut Off" condition.

#### 20.3.8 MODULE MOUNTING STRUCTURE

- a. The module alignment and tilt angle shall be calculated to provide the maximum annual energy output. This shall be decided based on the location of array installation.
- b. The structure shall be designed to allow easy replacement of any module and shall be in line with site requirement.
- c. The structures shall be fixed to the foundation in such a manner that, in future is required they can be easily relocated to a different foundation.
- d. The mounting structure shall be designed for simple mechanical and electrical installation. It shall support SPV modules at a given orientation, absorb and transfer the mechanical loads to the base properly.
- e. The mounting steel structure shall be as per latest BIS 2062 (amended up to date) and galvanization of mounting structure shall be in compliance of BIS 4759 (amended up to date).
- f. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from SPV panels at the same time.
- g. Nut & bolts, supporting structures including Module Mounting Structures shall have to be adequately protected from atmosphere and weather prevailing in the area.
- h. All fasteners shall be of stainless steel of grade SS 304.
- i. The Mounting structure shall be grounded properly using GI strips and maintenance free earthling kit.
- j. The pole structure shall be so designed to withstand the speed for the wind zone of the location where a panels is proposed to be installed (wind speed of 150 km/ hour. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.
- k. Hot dipped Galvanized Steel Structural with minimum 80 microns of galvanization must be considered for all type of structural steel proposed for the power plant
- 1. Design drawings with material selected shall be submitted for prior approval of the employer.
- m. The Bidder/Bidding Consortium/Bidding Consortium shall specify installation details of the PV modules and the support structures with appropriate diagram and drawings.

#### 20.3.9 Quality and Warranty

- i. The street lighting system (including the battery) will be warranted for a period of five years from the date of supply.
- ii. The PV module(s) will be warranted for a minimum period of 25 years from the date of supply. The PV modules 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.

iii. The Warranty Card to be supplied with the system must contain the details of the system.

## 20.3.10Operation and Maintenance manual

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

- > Basic principles of Photovoltaics.
- ➤ A small write-up (with a block diagram) on Solar Street Lighting System its components, PV module, battery, electronics and luminaire and expected performance.
- > Type, Model number, Voltage & capacity of the battery, used in the system.
- ➤ The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of W-LEDs used in the lighting system.
- ➤ About Charging and Significance of indicators.
- ➤ Clear instructions about erection of pole and mounting of PV module (s) and lamp housing assembly on the pole.
- ➤ Clear instructions on regular maintenance and troubleshooting of the Solar Street Lighting System.
- > DO's and DONT's.
- ➤ Name and address of the contact person for repair and maintenance, in case of non-functionality of the solar street lighting system.

## 20.3.11Work Execution

The completion period of the project shall be mentioned in the work order . .

#### 20.3.12Installation Guidelines

- All the electrical installations shall conform to the Indian Electricity Act, Indian Electricity Rules, and regulations.
- The mechanical and Civil installation shall conform to the applicable Acts and Rules of corresponding Inspectorate and other relevant authorities, if any.
- Provision of cable glands, ferrules, cable lugs, tags, sealing kits shall be arranged.
- Supply and installation of first aid boxes, shock treatment charts, rubber mats, and key board etc.
- Erection, testing and commissioning of various equipment shall be done strictly as per manufacturer's instructions.
- Cables shall be laid in conduits as per the electrical installation procedures
- The minimum bending radius of cables shall be 12D and 15D for LT and LT cable respectively.
- Interplant cable shall be laid to trenches, tunnel or overhead structure as per site condition. Digging and refilling of cable trenches, required erection accessories shall be in the scope of work of the Bidder/Bidding Consortium.
- Cable shall be fixed to cable racks or cable trays or run on cleats or in conduits, which

shall be fixed to concrete brick work or steel structure as required for proper support of the cables, easy accessibility and neatness of appearance.

- Perforated trays shall be provided for control cables.
- Approved type of danger boards, boards inscribing 'ISOLATED', 'DO NOT CLOSE,
  MEN AT WORK' in English, Telugu, Hindi and Local languages shall be provided in
  sufficient numbers.
- Special care shall be taken to make the enclosed equipment protected against entry of rats, lizard, and creeping reptiles which may create electrical short circuits.
- Approved cable markers of reinforced concrete shall be provided and fixed to mark
  each and every diversion of all buried cable routes. A marker shall also be placed every
  50 meters along straight portions of each route. A concrete cable marker shall also be
  provided and fixed to mark the position of every buried joints.
- Distinguishing labels of non-corrodible material marked in accordance with the cable numbers of the cabling diagram shall be permanently attached to each end of every cable. The phase or polarity of each power cable core at the cable ends shall be identified.
- Mounting of Inverters, Electrical panels, Dc and Ac junction boxes, Monitoring systems shall be done with proper mounting procedures with neat look.

#### 20.3.13 ERECTION, TESTING, COMMISSIONING

The scope of work of the Bidder/Bidding Consortium shall be complete erection of the equipment, cables, auxiliary systems and sub systems under the scope of work. The Bidder/Bidding Consortium shall make all arrangements to deliver the equipment at site by wagons/ trucks/ trailers, build his own stores (covered, uncovered, air-conditioned, if necessary) for the proper storage of equipment, maintain the stores and all related documents and records, transport the equipment to site for erection purpose. The Bidder/Bidding Consortium also shall make all security arrangements.

- The Bidder/Bidding Consortium shall be responsible for proper, quick retrievable and neat storage and also undertake the conservation of all consignments including damaged boxes. During storage of equipment, the Bidder/Bidding Consortium shall take into account deterioration and carry out the re-conservation of the complete equipment/parts/supplies as may be necessary as per the storage instructions of the Manufacturer of equipment/components. The Bidder/Bidding Consortium shall also supply the consumables required for such re-conservation work and repair/replace parts required thereof for the proper functioning of the equipment after erection and commissioning.
- The Bidder/Bidding Consortium shall retrieve the equipment/ materials from stores and transport the same to erection site.
- The Bidder/Bidding Consortium shall unpack and do visual checking against physical damages to the equipment/cases, clean equipment before start of erection. Damage/ shortage, if any, shall be reported to the Employer/ Consultant and shall be rectified/replaced expeditiously, so as not to upset the erection and commissioning schedule.
- The Bidder/Bidding Consortium shall provide all necessary erection equipment and tools

- & tackles including material handling equipment, cranes, compressors and other equipment and instruments and consumables, all commissioning equipment and instruments, welding equipment, winches, alignment tools, precision levels, etc., which may be required for carrying out the erection and commissioning work efficiently.
- All instruments shall be properly calibrated before use. Unless otherwise specified, the above erection equipment/ materials shall be the property of the Bidder/Bidding Consortium. However, Employer's prior permission shall be required for removal of these erection equipment/ materials from the site. The Bidder/Bidding Consortium shall ensure that proper procedure and documentation is maintained at entry gate of Employer's premises for such items as might be carried back by the Bidder/Bidding Consortium after completion of work.
- The Bidder/Bidding Consortium shall provide erection consumables like oxygen and acetylene gas, welding rods, solder lugs, oil, grease, kerosene, cotton waste, etc. required for erection of equipment and steel structures.
- The Bidder/Bidding Consortium shall construct and maintain his own site offices and stores as required for the work and arrange for maintaining in the area placed at the Bidder/Bidding Consortium's disposal in a neat manner.
- The Bidder/Bidding Consortium shall provide his scheme for mobilization with Bar Chart indicating clearly the resources, manpower and machinery proposed to be deployed to ensure timely completion of work and quality of workmanship
- On request, the Employer may help the Bidder/Bidding Consortium by providing any special handling/construction equipment needed in the interest of work subject to availability and on payment of hire charges and other conditions of Employer. The charges shall be recovered from any bill of the Bidder/Bidding Consortium due immediately thereafter.
  - All safety, health and pollution control measures as required to be adopted as per the Statutory Regulations and the Safety conditions for Bidder/Bidding Consortiums issued along with the tender or otherwise required or implied by statutory regulations or practices shall be strictly followed by the Bidder/Bidding Consortium during the execution of the Contract. The Bidder/Bidding Consortium shall set up a suitable safety organization of his own at site in this regard.
- Labor facilities such us shelter, food shall be arranged by the Bidder/Bidding Consortium. On request drinking water shall be provided by the employer.
- The Employer shall deploy/supply Supervising/operating & maintenance personnel and all raw materials, utilities & services required for commissioning.
- Auxiliary power supply facility for system testing & commissioning, Inverter auxiliary, luminaries, control room, Inverter room, site office and other power consuming areas shall be provided by the Employer
- The results of pre commissioning Test, start-up tests and commissioning report shall be recorded jointly by the Bidder/Bidding Consortium and the TSREDCO. And a cumulative report shall be duly submitted by the Bidder/Bidding Consortium to
- The Bidder/Bidding Consortium shall rectify the defects observed during the Commissioning period promptly.
- successfully commissioning as be accepted if the complete system remains synchronized with the grid for a period of 48 hours without any disturbance or interruption. During this period the system shall generate power during sunshine hours and export power to the grid

and during dark hours shall remain synchronized with the grid. If there is an outage isolation from the grid during this period due to defects in the system, then commissioning period shall start afresh after rectification of the said defect. However, if the ambient or the grid parameter are beyond the specified limits if any shall not be considered as stoppage.

• The Commissioning and project completion certificate shall be issued by the Employer subject to relevant conditions.

#### PART -IV: TECHNICAL BID

## 21. Technical bid format (Envelope-I)

All pages of the Technical Bid shall be organised section-wise, annexed with proof documents, serially numbered and stitched/ spiral bound intact and submitted) **Loose pages shall not be accepted.** 

## 22. General Particulars of Tenderer

1.	Name of Tenderer/Firm	
2.	Postal Address	
3.	E-mail address for communication	
4.	Telephone/ Fax No.	
5.	Name, designation, address, contact number and Email of the representative of the tenderer to whom all references shall be made.	
6.	Nature of the firm (Individual/ Partnership/Consortium/ Pvt. Ltd /Public Ltd. Co./ Public Sector, etc.) Attach attested copy of Registration & Partnership deed/ Memorandum of Association	
7.	Amount and particulars of the Earnest Money Deposited.	
8.	Annual Turnover for last three years i.e 2017-18 to -2019 -20 (Attach balance sheets from CA in this regard)	
9.	Name and address of the Indian/foreign collaboration if any.	

10.	PAN NO. (Copy of certificate to be enclosed)	
11.	Service Tax Registration No., GST No. (copies of certificates to be attached)	
12.	Has the Tenderer/firm ever been debarred by any institution for undertaking any work?	
13.	Any other information attached by the Tenderer (Details of Annexure / page no. where its enclosed)	
14.	Does Tenderer have any relative working in TSREDCO? If yes state the Name and designation.	

## 22.1 Details of Experience

Please fill in information about Supply & Installation of Streetlightsin the last three years.

	Year					
Details	2017–18		2018–19		2019–20	
	Qty	Capacity	Qty	Capacity	Qty	Capacity
	(No.)	(kW)	(No.)	(kW)	(No.)	(kW)
No. of Solar Streetlights						
Solar home lights						
If any other systems (specifiy)						
1.						
2.						
3.						
Total Capacity in kW						
Total Contract Amount (Rs.)						

Enclose copies of related work orders along with proof for satisfactory completion of that work.

## 22.2 Details about the blacklisting, if any

Information on litigation history in which Bidder is involved.

- 1) Whether blacklisted/ Debarred/Suspended from execution of work.
- 2) Other litigations. If any including Court litigations. Arbitrations etc.

Department and concerned officer	Other party (ies)	Case of dispute.	Amount involved.	Remarks showing present status.
1	2	3	4	5

## 23. Details about the Components to be used

S.No.	Description	Name of Manufacturer	Manufacturing Plant address& Details
1	PV Module		
2	LED Luminaries		
3	Solar Batteries		
4	Charge Controllers		
5	Cables		

## 23.1 Technical Details of Components

S.No	Description	To be furnished by the tenderer
Α.	SPV module	
1	Type of Module	Mono/ Poly crystalline
2	Make	
3	(a) Availability of RFID tag	
	(b) Whether inside the module	
4	Max power at STC Pmax (W)	
5	Max power voltage Vmp(V)	
6	Max power current Imp(A)	
7	Open circuit voltage Voc (V)	
8	Short circuit current Isc (A)	
9	Load voltage V ld (V)	
10	Conversion Efficiency	
11	No of cells per module	
12	No of bypass diodes in module	
13	Solar module frame material	
14	Module Dimension	
15	Module Weight	
16	No of Modules	
17	Series/ parallel combination	

18	Other details, if any
B.	LED luminaries
1	Make
2	Wattage
3	Lumunes per Watt
4	Output Wattage
5	LED Diode Make
6	Diode Wattage
7	Efficiency of the Luminaire
8	Voltage of the Luminaire
	i. Others
	ii. Fault indicators
C.	Solar Batteries
i.	Type of Battery
ii.	Make
iii.	Nominal Capacity
iv.	Other details if any
D.	Cables
1	Make
2	Size & Type
3	Standard
4	Other details, if any
Е.	Charge Controllers
1	Make
2	Size
3	Other details if any

Signature of the authorised person:

Name of the authorised person:

Designation:

Name and Address of Bidder

Stamp of bidder

## Conditions of contract for Supply, installation & Commissioning:

The following shall supplement the conditions already contained in the other parts of these specifications and documents and shall govern the scope of contract related to the Supply, Installation and commissioning.

**Scope of services:** - The scope of the work and duties and responsibilities of the contractor shall broadly include the following:

1. Supply & Installation including assembly, performing trail and pre-commissioning tests, adjustment, calibration etc, of the Solar PV based Standalone LED Streetlights and equipment.

Telangana State Renewable Energy Development Corporation Limited

- 2. Initial operation of the Solar PV based Standalone LED Streetlights and equipment till successful completion of trail operations.
- 3. Repairs, modifications and alterations, etc., of the Solar PV based Standalone LED Streetlights and equipment, whenever necessary until the warranty ends i.e., up to 5 years from successful commission.
- 4. Rendering clarification and guidance, on technical problems and drawings/ documents relating to the Solar PV based Standalone LED Streetlights and equipment.
- Preparation of detailed programmes/schedules for Installing and commissioning activities of the Solar PV based Standalone LED Streetlights and equipment including material and manpower planning.
- 6. Any other related services though not specifically mentioned herein before but necessary for proper execution of the work, as stipulated.
- 7. The bidder shall make arrangements for the storage at site.
- 8. Coordination with respective line departments shall be in the scope of bidder.

#### **Work and Services**

The successful bidder shall undertake to perform the complete job as per scope above. Such parts as may have not been specifically included but otherwise form part of the job are deemed to be included unless otherwise specifically excluded.

The successful bidder shall arrange for the services of fully qualified and competent supervising Engineer/Engineers and necessary number of personnel as the successful bidder deems it absolutely necessary with the requisite specialized skills for the erection, testing and commissioning of equipment.

All tools required for installation shall be arranged by the successful bidder. Inspection and testing of the complete installation and putting in regular service and shall bear the overall responsibility of the satisfactory installation, testing and commissioning of the equipment. The successful bidder shall make his own arrangements for Boarding & Lodging of his personnel.

The following facilities and services are also covered in the scope of successful bidder

Unloading and loading of equipment and accessories, transportation to the site and storage. Providing of necessary labor force required for the execution of the job. Providing of necessary transport facilities for the staff to be deputed by the successful bidder for installation work.

## **Commissioning Report**

The buyer and successful bidder shall properly maintain in the agreed formats their respective records of all observations and measurements taken in respect of all tests and operations. Joint protocol shall be signed on completion of each and every test / check till the trail operation. During trail operations all readings shall be jointly maintained and signed. On successful completion of trail operations, a report shall be jointly prepared and signed indicating results of all the tests / checks and trail operation readings.

Signature of the authorised person:

Name of the authorised person:

Designation:

Name and Address of Bidder:

Stamp of bidder:

## Checklist to accompany the tender

S.No.	Description	Submitted in Envelope	Page No. (see Note below)
1	Copy of Contractors valid empanelment certificate with TSREDCO	Yes /No	
2	Demand draft toward requisite Bid Security/ EMD (issued by any Nationalized/Scheduled bank)	Yes /No	
3	Online payment receipt of tender document fee	Yes/No	
4	Copy of PAN card.	Yes /No	
5	Copy of latest Income Tax Clearance returns submitted along with proof of receipt	Yes /No	
6	Copies of GST Registration Certificate.	Yes/No	
7	Latest GST/ Sales Tax clearance certificate.	Yes/No	
8	Availability of local service centers/ technical personnel	Yes /No	
9	Information on litigation history in which Bidder is involved.	Yes /No	
10	Experience Certificate	Yes /No	
11	NSIC Certificate/ MSME Certificate	Yes/No	
12	Company Registration Certificate	Yes/No	
13	Annual financial statements certified by CA	Yes/No	
14	All the technical specifications supportive documents as per the tender document	Yes /No	
15	Certificate to the effect the solar PV modules are indigenously manufactured in India	Yes /No	
16	Solar PV Module Efficiency has to be greater than 15% @STC. (proof to be submitted)	Yes /No	
17	Original Manufacturer Certificate	Yes /No	
18	Proof of approval by MNRE empaneled for battery	Yes /No	
19	LM79/LM 80 test reports	Yes /No	
20	All the technical specifications supportive documents as per the tender document	Yes /No	
21	Any other documents/certificate as specified in tender conditions	Yes/No	

#### Notes:

- All the statements copies of the certificates, documents etc., enclosed to the Technical bid shall be given page numbers on the right corner of each certificate, which will be indicated in column (4) against each item. The statements furnished shall be in the formats appended to the tender document.
- 2. The information shall be filled-in by the Tenderer in the check list, as applicable and shall be enclosed to the Technical bid for the purposes of verification as well as evaluation of the tenderer's Compliance to the qualification criteria as provided in the Tender document.
- 3. The bidder shall sign along with stamp on all the statements, documents, certificates by him, owning responsibility for their correctness/authenticity.
- 4. The technical bid along with all the supportive information as per the tender document shall be properly prepared and enclosed in the bid. The bid document shall be spiral bounded and placed in the respective envelopes and submitted to the address mentioned in the tender document.

### **PART -V: FINANCIAL BID**

#### 24. Financial Bid terms and Conditions

- i. Price(s) shall be FIRM and not subject to escalation on any account, till the contract is executed in full and its subsequent amendments accepted by the supplier even though the completion/execution of order may take longer time than delivery period incorporated and accepted in contract.
- ii. The prices quoted shall be lump sum and on FOR destination basis inclusive of all taxes and duties as mentioned in the format provided. The prices shall be FIRM throughout and until Supply, Delivery, Erection, installation, testing, commissioning including 5 year warranty period of the equipment/system covered under the contract is completed.
- iii. All applicable taxes/duties/levies etc., of state and central Govt., and any other taxes and duties that are applicable for such contracts in the State of Telangana as on the date of payment released shall be considered.
- iv. The Percentage rates of duties and taxes, etc., so considered and the price shall be clearly indicated in the financial bid without fail along with the price for Supply, Installation & Commissioning separately as per the format provided.

**Taxes, Levies and Duties**: all the applicable taxes payable shall be shown separately in the invoice.

Variations in Statutory Levies: Any variation, upward or down ward, in statutory levies or new levy is introduced after opening of the bids/placement of order shall be to the account of the Corporation, unless otherwise mentioned in the contract, provided that the delivery is completed within the contractual delivery schedule. In cases where delivery schedule is not adhered to by the supplier and there is upward variation/revision after the agreed delivery date, the bidder/supplier shall bear the impact of such increased levies and if there is downward variation/revision, the corporation shall be given advantage to that extent.

All royalties for patent or charges for the use or infringement thereof that may be involved in the construction or use of any equipment shall be included in the financial bid. The bidder/supplier shall protect the Corporation against any and all claims arising on account of the use thereof. The Corporation agrees to furnish the supplier any appropriate information or assistance.

### 25. Liquidated Damages:

In case the successful bidder fails to achieve the successful commissioning of the Solar PV based Standalone LED Streetlights within the due date for completion as indicated in the respective Work Order, then the Corporation shall levy the liquidated damages on the contractor at the rate of 1% (one percent) of the contract price per week of delay or part thereof subject to a maximum of 10% of total contract price. Liquidated Damages so levied will be recovered from the supply/erection bills of the Contractor. Notwithstanding to this the security deposit/contract performance security will be forfeited an the respective work will be awarded to another successful bidder.

# **26.** Timely Completion:

The work proposed by TSREDCO under promotional policies and time bound programme outlined by the Government of Telangana and thus the completion period is essence of the contract and the successful bidder shall take all necessary measures to execute the project in the least possible period preferably before scheduled completion period as mentioned in the respective work order.

# 27. Removal of Rejected Goods and Replacement:

- a. If upon delivery, the material/ equipment is found not in conformity with the specifications stipulated in the contract, whether inspected and approved earlier or otherwise, those shall be unacceptable to the Corporation or its authorized representative. A notification to this effect shall be issued to the supplier, normally within 10 days from the date of receipt of materials at stores.
- b. Supplier shall arrange suitable replacement supplies and remove the rejected goods within 7 days from the date of notification failing which, the goods shall be dispatched to vendor by road transport on, freight to pay basis "at suppliers' risk and cost.
- c. External damages or shortages that are prima-facie the results of rough handling in transit or due to defective packing shall be intimated within a fortnight of the receipt of the materials. In case of internal defects, damage or shortages or any internal parts, which cannot ordinarily be detected on a superficial visual examination, though due to bad handling in transit or defective packing should be intimated within 3 months from the date of receipt of these articles. In either case the damaged or defective material should be replaced by the supplier free of cost to the Corporation.

d. If no steps are taken within 15 days of receipt of intimation of defects or such other reasonable time as the corporation may deem proper to afford, the corporation may without prejudice to its other rights and remedies arrange for repairs/ rectification of the defective materials or replace the same and recover the expenditure incurred from the deposits such as security deposit, guarantees or other monies available with the corporation or by resorting to legal action.

# 28. FINANCIAL BID (ENVELOPE – II)

The prices shall be quoted online through e-tender portal. However, the empty financial bid shall be submitted in envelope II as mentioned in the below format (On company letter head).

Description/Capacity		Total Cost (in INR) for supply, transportation, installation, commissioning with	
Model	Wattage	comprehensive maintenance of 5 years including GST	
1	24 Watt SSL X 4 arm - GEL Battery as per Technical specification mentioned in Part – III of Page No.23		

### **NOTE:**

- 1. At the time of billing, the selected bidder has to submit the detailed breakup for raising invoices
- 2. In cases of discrepancy between the cost quoted in Words and in Figures, the lower of the two will be considered. (Total cost offered shall be both in words and figures).

#### **PART-VI: ANNEXURES**

#### BIDDERS UNDERTAKING COVERING

(Letter shall be submitted on Bidder(s) Letter Head)

Date:

To

The V.C & Managing Director
Telangana State Renewable Energy Development Corporation Limited (TSREDCO)
6-2-910, II floor, Vishvesharaya Bhavan,
Khairatabad, Hyderabad - 500 004

Dear Sir.

**Sub:** Design, Supply, Installation & Commissioning of 24 Watt X 4 arm Solar PV based Standalone LED Streetlight of 28 No's at various locations in Nagaram cluster of Jayashankar bhupalapally with 5 Years of Comprehensive Maintenance Contract under RURBAN Scheme. (2<sup>nd</sup> call- short Tender)

**Tender Reference:** TSREDCO/EC/SE/RURBAN-Jayashankar Bhupalapally /2020 dated 22.12.2020

\*\*\*

- 1. We have examined the Tender for Supply, Installation and Commissioning of Solar based LED street lights as specified in the Tender. We undertake to meet the requirements and services as required and as set out in the Tender document.
- 2. We attach our Technical Bid and Financial Bid in separate sealed covers as required by the Tender both of which together constitute our proposal, in full conformity with the said Tender.
- 3. We have read the provisions of Tender and confirm that these are acceptable to us. We further declare that additional conditions, variations, deviations, if any, found in our response shall not be given effect to.
- 4. We undertake, if our Bid is accepted, to adhere to the requirements as specified in the Tender or such modified plan as may subsequently be agreed.
- 5. We agree to unconditionally accept all the terms and conditions set out in the Tender document and also agree to abide by this Bid response for a period as mentioned in the Tender from the date fixed for bid opening and it shall remain binding upon us with full force and virtue, until within this period a formal contract is prepared and executed, this Bid response, together with your written acceptance thereof in your notification of empanelment, shall constitute a binding contract between us and TSREDCO.
- 6. We affirm that the information contained in the Technical Bid or any part thereof, including its schedules, and other documents, etc., delivered or to be delivered to TSREDCO is true, accurate, and complete. This proposal includes all information

- necessary to ensure that the statements therein do not in whole or in part mislead TSREDCO as to any material fact.
- 7. We also agree that you reserve the right in absolute sense to reject all or any of the products/ service specified in the bid response without assigning any reason whatsoever.
- 8. It is hereby confirmed that I/We are entitled to act on behalf of our company/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.
- 9. We agree to use only indigenous PV modules in this project.
- 10. We also declare that our Company/Organisation is not blacklisted by any of the State or Central Government and organisations of the State or Central Government.
- 11. We undertake to use the BoS components other than PV Modules and Solar grid tie Inverters as per the standards stipulated.

Signature of the authorised person:
Name of the authorised person:
Designation:
Name and Address of Bidder
Stamp of bidder

### CERTIFICATE AS TO AUTHORISED SIGNATORIES

(Designation), ar	nd
who signed the above Bid has been du	ly
ganisation.	
	who signed the above Bid has been du

# **DECLARATION (TO BE SUBMITTED ON LETTER HEAD)**

I / WE
$I/WE\ hereby\ declare\ that,\ I/WE\ have\ not\ been\ blacklisted/ debarred/ Suspended/ demoted$ in any department in Telangana or in any State due to any reasons.
Signature of the Tenderer with Seal

### DECLARATION BYTHE TENDERER (TO BE SUBMITTED ON LETTER HEAD)

I/W	<sup>7</sup> e			
<b>_</b> / * *	<b>C</b>	 	 	

(Here in after referred to as Tenderer) being desirous of tendering for the work, under this tender and having fully under stood the nature of the work and having carefully noted all the terms and conditions, specificationsetc.as mentioned in the tender document do hereby declare that

- 1. The tenderer is fully aware of all the requirements of the tender document and agrees with all provisions of the tender document and accepts all risks, responsibilities and obligations directly or indirectly connected with the performance of the tender.
- 2. The Tenderer is fully aware of all the relevant information for proper execution of the proposed work, with respect to the proposed place of works/site, its local environment, approach road and connectivity etc. and is well acquainted with actual and other prevailing working conditions, availability of required materials and labor etc. at site.
- 3. The Tenderer is capable of executing and completing the work as required in the tender and is financially solvent and sound to execute the tendered work. The tenderer is sufficiently experienced and competent to perform the contract to the satisfaction of TSREDCO. The Tenderer gives the assurance to execute the tendered work as per specifications, terms and conditions of the tender on award of work.
- 4. The Tenderer has no collusion with other tenderers, any employee of TSREDCO or with any other person or firm in the preparation of the tender.
- 5. The Tenderer has not been influenced by any statement or promises by TSREDCO or any of its employees but only by the tender document.
- 6. The Tenderer is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.
- 7. The Tenderer has never been debarred from similar type of work by any Government Undertaking /Department. (An undertaking on Non-Judicial Stamp paper worth of Rs. 100/- in this regard shall be submitted)
- 8. The Tenderer accepts that the earnest money / security deposit may be absolutely for feted by TSREDCO if the selected bidder fails to sign the contractor to undertake the work within stipulated time.
- 9. This offer shall remain valid for acceptance for 3(Three) months from the proposed date of opening of Tender.
- 10. All the information and the statements submitted with the tender are true and correct to the best of my knowledge and belief.

(Signature of Tenderer)

# Important Note:

All the details and information (attachments) as per requirement mentioned in the tender document shall be placed in the respective Annexures and reference shall be mentioned in the respective locations in the bid. All the annexures shall be submitted in Envelope I. i.e., along with technical bid.